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DEPARTMENT OF STATE

AGENCY FOR INTERNATIONAL DEVELOPMENT

WASHINGTON, D.C., 20523

PROJECT PAPER

for a

KOREA HEALTH DEMONSTRATION LOAN

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Memorandum

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DATE: May 27, 1975

FROM Norman Cohen, EA/CCD

SUBJECT: EAPAC Meeting to Discuss PP on Korea Health Demonstration Project

There will be an EAPAC meeting on Friday, May 30, at 10:00 in Room 6210 NS to discuss the attached Project Paper on the Korea Health Demonstration Project.

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KOREA - Health Demonstration Loan

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SECTION I - SUMMARY AND RECOMMENDATIONS

A. Face Sheet Data

Borrower: The Government of the Republic of Korea (ROKG) will be the Borrower. The implementing agency will be the Korea Health Development Corporation (KHDC), acting through the National Health Council, chaired by the Economic Planning Board.

B. Amount of Loan: Five Million Dollars ($5 million).

C. Duration of Loan Project: Five years, with disbursements occurring in FY 1976-80.

D. Terms: Repayment within 40 years, including a ten-year grace period; interest at two percent (2%) annually during the grace period, and three percent (3%) thereafter.

E. Outline of the Health Loan Project

The sector goal in the Korean Health Demonstration Loan Project is to create and institutionalize a process which gives effective access to basic promotive, preventive and curative health services to low-income citizens at a cost affordable* by the Government. The Loan Project purposes are to:

1. Establish the capability within the ROKG to plan, conduct and evaluate low-cost integrated health delivery projects directed primarily toward low-income families.

2. Demonstrate successfully a multi-gun (county) low-cost integrated health delivery system that is replicable in other parts of Korea.

*Affordable cost means a cost reasonable enough to permit replication to target populations throughout the country within the nation's resources.

The implementation of the Health Loan will lead to these expected outputs:

1. A new semi-autonomous unit (KHDC) chartered, staffed and functioning.

2. The creation of a National Health Council to guide the KHDC, and to engage Korean multi-sectoral decision-makers in the formulation of national health policy.

3. The establishment of a National Health Secretariat under the aegis of the Economic Planning Board (EPB) to perform staff functions for the Council, conduct health research and planning (through utilization of Health Planning Project No. 489-11-590-708), evaluate the programmatic experiences of the KHDC, and distill policy-relevant materials from the KHDC and similar demonstration projects for the Council.

4. Initiation by the KHDC of several gun-level and at least one multi-gun health care delivery projects capable of demonstrating innovations which enhance accessability to primary care for low-income populations.

5. A program for training, deployment, and utilization of primary health care workers ("physician extenders") throughout demonstration areas.

6. Assessment of health care problems and on-going programs, and dissemination of findings through seminars, workshops, newsletters, and scholarly publications.

7. Research on topics important to the development of national health policy relating to improvement in access and equitability for low-income populations.

The planned inputs for this project are explained in the Logical Framework Matrix, Attachment I.

F. Summary Description of This Project

(1) As indicated in Section E., the basic goal of this project is to develop a new system for providing better health care to low-income Koreans. However, the goal must be achieved without imposing excessive financial burdens on the individual receiving services or the Korean Government. Since the delivery of "low-cost" health services is a new area of concern in most countries, experimental or demonstration activities must be undertaken to develop and field-test alternative delivery schemes appropriate for Korea. The results of such demonstrations and tests must then be objectively evaluated and passed on to national economic planners in the form of policy and program recommendations. This innovative effort will require the establishment of new, flexible organizations to plan and implement the demonstrations and to translate the results into national action alternatives. The AID Loan Project will provide supplemental resources which are critical to the successful establishment of these organizations and the initiation of a new effort to provide basic health services to those Koreans who are too poor to afford them under the existing system.

(2) The following organizational mechanisms necessary to implement the loan project were identified in negotiations between the representatives of the Economic Planning Board, the Ministry of Health and Social Affairs, and the USAID Project Development Team:

1. Functions of the Korea Health Development Corporation (KHDC)

   a. In accordance with the aforementioned project purposes, the KHDC will develop its goals, objectives, organizational plan and action plan and submit same for approval to the National Health Council (NHC). A positive vote of at least four of the seven members of the Council is required to approve the Corporation's plan. This initial plan shall be drafted with the staff assistance of the National Health Secretariat, and then passed through the Ministry of Health and Social Affairs (MHSA) for comments and transmittal to the National Health Council. Each year thereafter, a similar process shall be followed for approval of the Corporation's annual plan.

   b. The KHDC will identify and assess existing health service delivery efforts in relation to the health needs of low-income people. In conducting its activities, the KHDC will also make every effort to increase the support of private and public organizations for meeting the needs of low-income citizens in both the rural and urban areas.

   c. The KHDC will initiate, finance, and oversee a multi-gun low-cost integrated health delivery demonstration project (some elements of this may have to be performed under contract). This would require the active participation and cooperation of public and private sector interests in the selected demonstration areas.

   d. The KHDC will identify innovative ways of effectively delivering health services and provide support for such efforts in both small and large-scale projects.

e. The KHDC will support the dissemination of information about methods of providing and financing preventive and curative health services, including the holding of periodic conferences, workshops, the support of training activities, newsletters and other information and education materials.

f. The KHDC will elicit community participation and initiative in the planning and implementation of health delivery systems started under the health loan project.

g. The KHDC will attempt to assure that personal health services are accessible and available to low-income groups starting with the first contact for health care (i.e., at the primary care level).

h. The KHDC will conduct or sponsor research and prepare recommendations related to the short and long-term health issues of the country. Priority will be given to operational research and evaluation activities related to the health demonstration activities of the loan project. The Corporation will take steps to avoid duplication of effort with organizations such as the National Health Council's (NHC) Secretariat. The KHDC will solicit program-related research proposals from the MHSA, other health related governmental bodies, and private sector organizations for consideration as part of its annual research program. The KHDC's research program shall be included in the annual work plan submitted to the Council.

2. Functions of the National Health Council

a. The Council will promote the coordination, planning and integration of public and private resources to develop comprehensive health services for persons of low income.

b. The Council will provide general support and assistance to help the Korean Health Development Corporation (KHDC) and its health demonstration projects achieve their purposes. The Council will be especially concerned with obtaining interministerial support for (a) implementing innovative health improvement projects and (b) disseminating the successful results of these projects on a national scale.

c. The Council will work with appropriate groups and organizations to promote a national concern and set of priorities for improving health services for low-income groups. The Council will strive to develop a model of a national health delivery system which meets the needs and conditions of Korea.

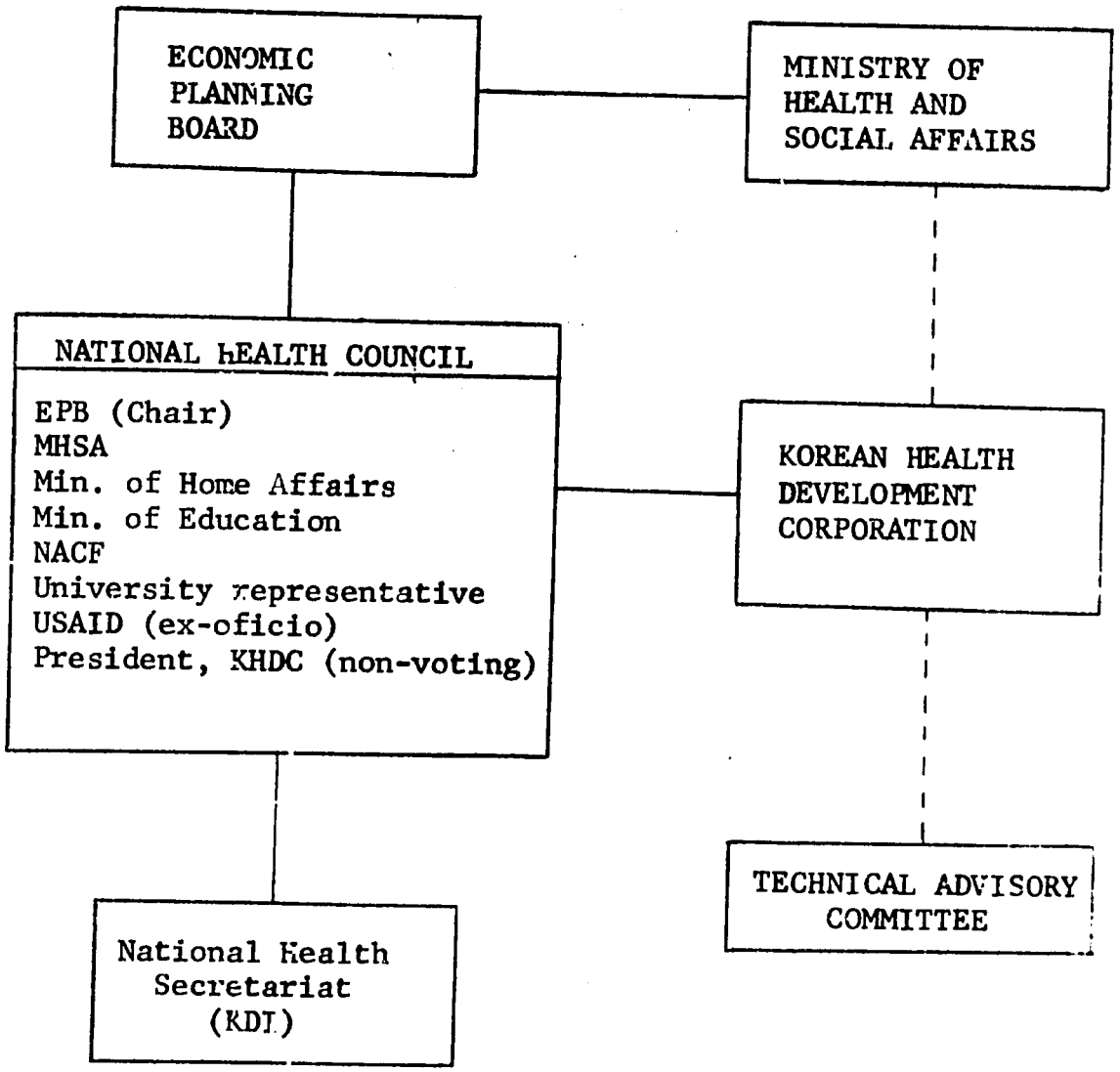
d. The Council will be responsible for conducting general program reviews of the loan project and making the results of such reviews available to the Economic Planning Board (EPB), MHSA, KHDC, USAID, and other appropriate organizations. The Council may sponsor or conduct such research as is necessary to relate its review findings to national health problems and requirements. The Council shall be supported by a National Health Secretariat to be created under the aegis of EPB for these purposes.

e. The Council shall consist of eight members, six of whom are regular members (see Table I-1). The seventh member shall be elected by the regular members for a two-year period, and shall be a full-time academician on the staff of a respected graduate school of public health, medicine, or nursing. The eighth member, non-voting, is the President of KHDC.

f. Upon the recommendation of a majority of members composing the Board of Directors for KHDC, the Council will be responsible for the appointment to and removal from office of the President of KHDC

TABLE I-1

MODEL OF THE KOREAN HEALTH DEVELOPMENT PROJECT



——— solid line indicates direct lines of authority

- - - - dotted line indicates advisory links

by a vote of no less than five (5) of the Council's seven (7) voting members.

3. Functions of the National Health Secretariat

a. The Secretariat, operating under the aegis of the EPB, shall conduct general research and evaluation activities and provide professional staff support and advice to the EPB and the National Health Council. The Secretariat's functions shall be carried out by the Korean Development Institute (KDI) and be supported by funds made available under the loan project. The KDI will provide senior level staff support to facilitate implementation of the Secretariat's functions. Specifically designated funds will be provided for the Secretariat in accordance with provisions in the Project Paper.

The Secretariat will be responsible to the EPB for assisting the Council to:

(1) - Analyze through evaluative research techniques the programmatic experiences of the Korean Health Development Corporation (KHDC).

- Analyze activities of similar low-cost health delivery projects in Korea and in other countries.

- Perform ad hoc research activities as requested by the Council for the purpose of filling specific information gaps.

- Conduct seminars for high-level Korean policy-makers on national health issues.

(2) Conduct certain health research/planning (encompassed by Health Planning Project 489-11-590-708) until such time as the Council deems it necessary to transfer such activities to the KHDC and/or MHSA as stated in article d., Section 3 below.

(3) Present the research results to the National Health Council as recommendations for policy decisions and as research and demonstration guidelines for the KHDC. The Secretariat will be especially concerned with distilling and reporting research findings and field demonstration results which are relevant to national health policy formulation and program development.

b. The Secretariat will develop a broad framework for classifying national health problems and establish a comprehensive cross-file and data bank on completed studies and work in progress related to these health problems.

c. The Secretariat will facilitate contacts between domestic and foreign researchers, institutions, and organizations active in the health services delivery field.

d. Upon the joint recommendation of the EPB and USAID to the Council, certain activities being performed by the Secretariat may be transferred to the KHDC and/or MHSA by a simple majority vote of the Council. Such transfers will occur as the KHDC develops its proven capacity to undertake these tasks. The Secretariat will retain the functions listed under article a., provisions (1) and (3) above.

G. Project Costs and Financing Arrangements: The total cost of the project during the period 1976-1981 will be $6,667,000, of which approximately $1 million represents foreign exchange costs and $5.67 million local currency costs. All foreign exchange costs and approximately $4 million of local currency costs will be financed from the proposed AID loan. The ROKG will finance the remaining local currency costs of about $1.67 million. Authorization of the full $5 million AID loan is requested in FY 1975.

H. Other Sources of Funds: There are no other international lenders interested in participating in the financing of this project. However, the World Bank is presently negotiating a $20 million loan to the Ministry of Education for business and health education and training, of which approximately $4 million will be utilized for training allied health personnel. The latter is thus a complementary activity to the purposes of the AID health loan, since the Corporation will also seek to train and utilize these types of personnel in the demonstration area(s).

I. Statutory Criteria: All statutory requirements have been met as set forth in Attachment II.

J. Issues: Issues concerning the project are discussed in Section II of the Project Paper. In the Project Development Team's opinion, while some of these issues present definite risks to an effective demonstration of health services delivery to low-income residents, there is reason to believe that they will be resolved favorably.

K. Recommendation: On the basis of the conclusions of the Project Development Team that this health project is technically, economically and financially sound, and has the built-in mechanisms for distilling policy-relevant materials impacting on national health alternatives, it is recommended that a loan be authorized to the Government of the Republic of Korea in an amount not to exceed $5 million, subject to the terms and conditions stated in the Draft Loan Authorization, Attachment III.

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SECTION II - PROJECT BACKGROUND

Historical Background

This health demonstration loan project is the outgrowth of several studies by AID teams during the past two years. Members of these special teams and USAID/Korea staff members have worked with a wide range of Korean representatives to identify the country's major health problems and needs. (See overview provided in FY 1976 FBS, August 1974.) As indicated in the PRP approved on January 23, 1975, Korea has excellent medical specialists and hospital facilities in the major urban areas, but these are normally accessible only to a small minority of economically advantaged Koreans. In the rural areas, it is estimated that only 15-20% of ill persons have access to hospitals or clinics. About 45% obtain their primary curative services from pharmacies or drug stores and 10% from herb doctors, while 30% receive no treatment.

These surveys, and a capstone study by Family Health Care, Inc., in June 1974 ("Steps Toward a National Health Strategy for Korea"), led to a joint determination last year that the ROKG needed to develop a national health initiative and program which would extend health services to those citizens who are now excluded from the system. Subsequently, a grant-funded project agreement was signed on June 29, 1974 by USAID and the Economic Planning Board to establish a macro-planning system for the health sector (Health Planning Project, 489-11-590-708). The services of health planning specialists have been made available to the ROKG through an AID contract with the Westinghouse Corporation's Health and Population Group. This contract activity became operational in February 1975 and is scheduled to terminate about September 1976.

The AID Health Loan Demonstration Project described herein will provide a natural complementary activity to the grant-funded Health Planning Project by supporting the establishment of the Korea Health Development Corporation.

From FY 1966-FY 1974, USAID health-related assistance was concentrated largely on population and family planning. Approximately

$4.4 million in assistance was provided under the Health and Family Planning Project (489-11-580-649) during this period. For FY 1975-76, about $350,000 will be spent under this project to support the dissemination of new sterilization techniques. It is intended that the health loan project will provide continuing support for strengthening MCH and family planning services after this grant project terminates in FY 1976.

During the period following the Korean War, U.S. assistance was provided to develop potable water systems, conduct disease and pest control programs, train health personnel, and carry out other programs to help restore the health situation to at least the pre-war status. While there were other types of inputs related to health during the period 1954-1973, it is estimated that $37.6 million was provided directly for "Health and Sanitation" programs. This constituted only 0.9% of the total U.S. economic assistance effort in Korea.

The Need to Develop New Delivery Systems

As indicated in the PRP, the loan project will fund field demonstration project(s) to test new ways of delivering primary or basic health care to lower-income groups. It is expected that these projects will introduce such innovations as (1) training and utilizing non-physicians (e.g., nurse-clinicians used as physician extenders) to actually provide selected preventive and curative services which are now available only from physicians, (2) introducing integrated public health care services (e.g., MCH, nutrition and family planning) and making these available at the myon (township) and village level (most types of service are now available only at the gun (county) or higher levels), (3) coordinated community-wide efforts to improve environmental and personal sanitation, (4) extensive efforts to promote good health through public information and education, and (5) use of pre-payment, health insurance, or other schemes to test alternatives for financing of community health services.

As the PRP also points out (in the issues section), before the demonstrations can be effectively planned, implemented and

evaluated, a new organizational system must be created to support such projects and to channel their results into appropriate policy and decision-making centers within the government. The Project Development Team thus deemed it essential to resolve some of the critical issues related to general strategy and organization before dealing with the types of health demonstration projects which might be pursued.

Organizing for Health Program Innovations

The need for a new, semi-autonomous organization to promote innovation in the health sector had been noted by all of the previous AID study teams and endorsed by most Korean observers. It was also assumed earlier that this basic institution-building activity would be completed under the grant-funded health planning project and that the loan-funded field demonstration would come later. However, overall AID programming constraints for Korea required, in effect, that both the grant project and the loan project be developed simultaneously. While creating extremely difficult time pressures on the USAID and ROKG staffs concerned, both projects have complementary needs and objectives. Both the Project Development Team and the AID Health Planning Team (Westinghouse Corporation contract) essentially desired the creation of an organizational system which encompassed: (1) a semi-autonomous body to plan, implement and evaluate new health delivery systems, (2) a top level health planning council to promote interministerial cooperation, (3) a separate professionally-staffed unit concerned with macro-planning and research (and with strong links to the Economic Planning Board and the Ministry of Health and Social Affairs), and (4) a strong health planning unit within the MHSA.

As indicated in Section I above, general agreement has been reached on creating: (1) the Korean Health Development Corporation (the semi-autonomous body to field test delivery systems), (2) the National Health Council (a top-level, interministerial group) and (3) the National Health Secretariat (a small, professional staff concerned with macro-research/planning and the overall evaluation of the project).

The Role of MHSA

In line with the ROKG desire to have the MHSA strengthen its capacity to carry out health planning, it is expected that both the grant and loan projects will encourage and support developments in this direction. project to encourage and support developments in this direction. The first prerequisite is for the MHSA to create a health planning section since there is currently no regular unit and staff to conduct planning. Once this is done, the MHSA planning staff can be trained abroad and in-country under the Health Planning Project. As the MHSA develops its planning capabilities over time, it can expand its scope and range of activities and absorb certain planning and research activities of the Health Secretariat. However, the Council and Secretariat would continue to be responsible for the overall evaluation of the loan project. It is also expected that the MHSA would depend upon the KHDC to conduct much of the research needed to support health programs. The MHSA will also be fully involved in the activities of the new KHDC and Health Council through representation on the directing bodies, through reviews of the KHDC's annual work plan, and through involvement in field demonstration activities.

The proposed new structure for program innovation may appear more complex than desired, but it does represent what the Project Development Team feels is a workable balance of resources and influences, given the existing bureaucratic and policy constraints. The MHSA and EPB have now accepted the scheme and are eager to get on with the job of authorizing and activating the structure so that the actual field demonstration projects can be initiated.

The "State of the Art" in Health

It may seem strange to some that the Project Paper devotes so much effort to what are basic institution-building activities when the main component of the project is to carry out field demonstration activities. After so many years of AID assistance activities and the amazing economic performance in Korea, why

is it necessary to require new organizations and systems for carrying out health projects? It is simply a question of priorities. Within AID, the development of low-cost primary health care services has become a priority area only within recent years. The concern with developing a low-cost health delivery system is also a recent occurrence in most countries. Within Korea, a conscious decision was made to give priority to industrial development in past national economic programs. Health has thus been passed by in the allocation of attention and resources. Korean policy-makers are now attempting to redress the situation and are seeking AID assistance to do so. Such a request falls directly under the new mandate given AID by Congress to stress programs which will directly benefit the poorer groups in the LDC's. By the time this PP reaches AID/Washington, almost two years will have been spent in desultory surveys, discussions, and preliminary planning activities by AID staffs visiting or assigned in Korea. It was obvious to all of these groups that we could not develop low-cost health services through a simple transfer of technology. In fact, the earlier transfers of essentially U.S. medical technology and private physician-based systems were partially responsible for the costly health care system which currently exists in Korea.

However, elements of alternative systems have been developed in the U.S. and other countries, as well as in Korea itself. In Korea, there are several small (myon-level) community medicine projects which have been initiated by universities or missionary groups. Some have been started primarily to serve as staff training and research sites, but the high demand for service among the population has often led to expansion of the service component. The Project Development Team felt that the first task of the KHDC would be to assess the results of these local experiments and obtain information on relevant developments in other countries. The data obtained from these reviews would then provide a basis for designing demonstration projects which are appropriate to Korean conditions. It would therefore be presumptuous of the Project Development Team to attempt to include demonstration designs in the PP. However, in Section IV,

we suggest the types of services which can be included in such projects to address the health problems resulting from current conditions. All indications are that the target population is ready and eager to receive health services and to support such a program with the limited resources at their disposal.

The AID loan project could provide a major catalyst for restructuring health care in Korea to better serve the disadvantaged majority. The new organizational and programming systems should yield the following general benefits: (1) some of Korea's best health talent can be attracted into the system to help develop new approaches to health care, (2) resources are provided for the specific purposes of experimentation, innovation, and improvement, (3) channels are provided to link research and demonstration findings with national economic planning, (4) a better focal point is provided for attracting other local or international donors who are concerned with improving health in Korea, (5) the project may produce prototypes or models for low-cost health care which can be applied to other countries, and (6) improved health services will be provided to approximately 500,000 Koreans in the project areas. While the Project Development Team recognizes that innovative projects of this type entail an element of risk and a longer "take-off" period than the typical capital development project, the anticipated positive impact on the health sector in Korea justifies the undertaking of the Health Demonstration Loan Project.

SECTION III - SOUNDNESS ANALYSIS

A. Policy Soundness

The delivery of health services to a low-income population has become a growing concern of public-policymakers in Korea. It is not known at what cost and for what return such services can be made available and accessible to this income group. The uncertainty of this fact alone raises fundamental questions among policymakers. Basic decisions determining which sector of the economy receives what percentage of the national product are justified on the basis of contributions to a constantly rising GNP factor. In this sense, health has been a non-competitive entity among policymakers because it is perceived in many countries as a welfare issue rather than a potential contributor to overall socio-economic development.

The Ministry of Health and Social Affairs (MHSA) is considered by the Economic Planning Board (EPB) to be the ministry responsible for national health planning and policy. Furthermore, this ministry has been charged by the Government with the task of designing a cohesive health strategy to be incorporated in the five-year economic plans for 1977-81 and 1982-87. Currently, MHSA has a budget of $14 million for health, or approximately 43¢ per capita. Another $11.4 million, or 35¢ per capita, is spent by the Ministry of Education to support education for medical personnel, midwives, pharmacists, etc., while the largest public outlay is with the Ministry of Home Affairs where $38.8 million, or $1.18 per capita, is allocated. The latter is responsible for the maintenance, management and administration of most public health facilities, including all salaries associated with support requirements.

The estimated aggregate per capita health expenditures for the public and private sectors are listed below:

1973 Health Expenditures

	Percentage	Per Capita
Private Sector	82.0%	$ 8.57
Ministry of Home Affairs, and Education	14.0%	1.52
Ministry of Health and Social Affairs	4.0%	.43
	100%	$10.52
As a percent of GNP at $335 per capita, private sector in health expenditure represents	2.6%	
Public sector represents	.6%	

Reliable trend information is not available, but the hypothesis can be advanced from anecdotal material that the private sector is pursuing its own path of health services development. Both the EPB and MHSA have come to realize that as demand for health services increases with per capita GNP, national health resources will be increasingly allocated toward regulatory mechanisms for the private sector at the expense of expanded health services delivery capacity in the public sector. The agreement by both these parties to support a National Health Secretariat (independent of the proposed new Korean Health Development Corporation and any one ministry) for the purposes of macro-planning, research, and evaluation of national health programs portrays an understanding of the need to initiate a rational public policy in health at an intervention level calculated to engage societal decision-makers.

In terms of present public policy and allocation of health resources, it can be said that:

*See Table III-15 for additional data on expenditures.

1. There exists no central planning or analytic health resource process in the Government.

2. There is no ongoing institutionalized method for bringing together government and private sector health interests around common issues.

3. There is no mechanism to determine the national allocation of health manpower and facility resources, nor to determine, at the local level, the appropriate and most effective resources available.

4. The current expansion of the health service delivery capacity in Korea is almost entirely in the private sector.

5. The concept of medical insurance has received wide and favorable reception in the public and private sectors. However, as a financing mechanism, the concept is misunderstood and generally misapplied.*

   a. Most Korean Blue Cross programs tend to be directed toward a low-income or high risk population.

   b. Enrollment is on an individual basis, not group.

   c. Benefit schedules on health insurance programs do not allow coverage for pre-existing diseases. Given the high morbidity and mortality patterns for new born children, costs will escalate as this segment of the population matures.

   d. Although the present insurance schemes include life insurance, no public or private carrier is available to develop actuarially sound programs and deploy reserves for capital investments in health systems.

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*Steps Toward a National Health Strategy for Korea, 1974 Family Health Care Report to AID.

e. Existing community insurance schemes, and most company-sponsored schemes, are not economically viable as they now operate. They are subsidized by the ROKG, private companies (as tax deductions) and external donors. The Korea Oil Company operates its program in the black, but others are in the red as insurance income accounts only for approximately 10% of operating costs. The remaining revenues are from cash pay patients.

6. The predominant pattern for the management of acute illness is non-physician, i.e., it is estimated that 70%* of consumers seeking medical attention first enter the system through the pharmacists or druggists.

7. The special cities of Seoul and Pusan have approximately 24% of the population and:

   a. 46% of all physicians;
   b. 53% of all pharmacists;
   c. 43% of all hospitals, and 50% of all beds.

8. Professional manpower resources, i.e., physicians and nurses, are not trained for the needs of Korea, and are emigrating in increasing numbers. In particular, nurses -- because of prevailing cultural patterns -- tend to work only three years. After marriage, they are no longer economically active in the health manpower pool.

9. The delivery system is designed around the most expensive unit of care: hospitals.

Without appropriate policy intervention by the Government, these trends will probably occur in the next several years:

1. While the immediate expansion of the health service delivery capacity will be in the private sector, pressures will build up for national financing and support.

*National Institute of Health, Seoul, Korea

2. As supply of physicians and nurses remain relatively static against rising demand, disparity in accessibility, availability and quality of services between urban and rural Korea will increase.

3. The Government will be forced into regulatory functions rather than an expansion of delivery capacity.

4. The attempt to redress inequities will most likely be through capital construction and facilities.

5. Industry and others will be relieved of their responsibilities to provide on-site services and shift to purchasing insurance. This trend has already been noted with the shipyards in Kojedo and with the Dong-Won Coal Mine, Korea's largest, in Sabuk.

6. The movement toward specialization will grow.

7. While experimentation does take place, which includes incorporating greater use of allied health professionals, medical insurance, and the like, these will be frowned upon by the dominant system.

8. No national strategy would have been evolved which effected change at the delivery level.

The many questions now being raised about health stem in part from the rapid rate and haphazard pattern of its growth, especially in the private sector. They also arise as a result of the growing demand for a public role. The questions being raised concern:

1. The capacity of the public health sector as presently organized to produce policy-relevant knowledge.

2. The effectiveness of existing arrangements by which policymakers and public health program managers seek to acquire and utilize relevant knowledge.

3. The potential contribution of the total health sector to the re-examination of national health policies and programs that may be required to reverse the growing trend toward an entrenched Western delivery model.

When demonstration programs mirror conflicting interests that on the one hand limit their expansion, and on the other hand prevent their abolition, it is very difficult to incorporate design and evaluation characteristics that enable society to learn what they demonstrate. Value differences among interest groups in the public sector within Korea produced resistance to the incorporation of a systematic evaluative research mechanism, independent of KHDC and health related ministries. However, if the existing system is in the hands of one set of professionals committed to the status quo and the demonstration of the new system is in the hands of a second set committed to their expansion, the ROKG decision-maker would be without an independent basis for choice. If the Project Development Team had not made adequate provision for appropriate design and evaluation, through the Health Secretariat, this would almost certainly have been the case. This is especially true when considering the difficulty of finding common ground between the administrators of a demonstration program committed to success in providing an important social good and a research oriented staff seeking to objectively assess how much net social good is in fact provided.

Throughout the negotiation process, MHSA and EPB continually raised the point of "who would take responsibility if the project was not a success". The consistent response was that this was a demonstration project and the mechanisms set in place were to insure the generation of policy-relevant knowledge for national decision-makers. In this sense, knowing what works is as important as knowing what does not work if the knowledge is subsequently to be used for the formulation of a national health strategy.

Currently, there is a mismatch between the world of emerging health policy and macro-economic planning in Korea. This health demonstration loan is in part a program initiative to reduce the incompatibilities and communication gaps between the two parties. At present most of the questions one can raise about the issues are unanswerable. Broadly, the explanation as to why they cannot be answered has two aspects:

1. The ROKG does not now have an agreed authoritative process for the formulation of longer-term health policy; and,

2. Even if such a process existed, the Government has not provided the necessary leadership to direct the sustained effort that would be essential to evaluation of and agreement on sound policies.

The proposed health loan project is designed to:

1. Conduct a demonstration project for extending health services to low-income residents, primarily those in rural areas (KHDC).

2. Independently evaluate and distill policy-relevant materials from the programmatic experiences of the KHDC (National Health Secretariat).

3. Engage Korean decision-makers through the intervention techniques in item 2. in the emergent health policy area so rational choices can be made in the five-year plan scheduled to begin in 1982 (National Health Council).

Without these complementary mechanisms in place, any health demonstration project would stand only a problematical chance of impacting on national decision-makers. Korea has made the difficult choice in this health loan to link the acquisition of knowledge in the demonstration area to the highest councils of government rather than any one ministry. This policy decision illustrates a rational understanding of the complex

issues involved in the development of a health delivery capacity that may well be emulated by other countries.

Policy Summary

The prospect is that social expenditures both under the next five-year plan and the one to be initiated in 1982 will continue to increase. Thus, not only the intended beneficiaries, but Korean society as a whole has a major stake in the effectiveness and economy of social programs. In the health sector, one can advance these hypotheses:

1. Korean capabilities to undertake a coherent social effort in a policy area (health) that cuts across traditional institutional lines are weak to non-existent.

2. Korean capability to initiate an innovative thrust in health delivery is extremely limited.

3. Korean policy capacity to systematically address the complex and changing relationships between health and other sectors of the economy is very limited.

The Project Development Team believes that the program arrangements elaborated and agreed upon for this Project will provide an incipient Korean capacity to effectively address the problems listed above.

B. Social Soundness

1. Social Objectives in Korea

In 1977 Korea will be starting a new five-year plan which will give added emphasis to the achievement of social development goals. The issue of extending better health and medical services to a broader segment of the population will inevitably be an important element in the plan's design, especially so since the Ministry of Health has been charged by EPB to formulate the structure requisite to its implementation. The programmatic experiences of the KHDC are so designed as to engage decision-makers at the highest levels on emerging health issues through policy recommendations by the National Health Secretariat to the National Health Council.

Before embarking on a program geared to achieving new social development objectives, especially in the 1982 five-year plan, it is expected that the experiences of the KHDC will offer guidance on the following questions:

> To what extent can and should the health sector compete with demands of other sectors on scarce resources?
>
> How can equitable programming in the health sector serve as a stimulus and complement to investments and achievements in other sectors, such as education, agriculture, and industrial development?

Though professionals in the health field often dismiss these questions, condemning them as obstacles to "getting on with the job" of reducing morbidity and mortality, more attention must be paid to their critical analysis and solution. In a very real sense, the resources available to health care planners in Korea depend on finding satisfactory answers to these and related questions. The ROKG

is faced with the harsh reality of allocating resources among competing demands and has demonstrated its willingness to act decisively upon such comparative distinctions. For instance, when the Arab States imposed the oil embargo in October 1973, Korea was forced to postpone the implementation of its National Welfare Pension System and to limit the total subsidy budget to $41,013 nationally for the Medical Insurance Law in 1974, and to $53,100 in 1975.*

If Korea is to meet its social objectives under the next two series of five-year plans and begin the development of a comprehensive long-range action program for improving health care services to low-income groups, the conceptual strategy must be linked to:

> An increase in basic and applied knowledge for defining parameters of inputs and outputs of health services, i.e., the development of relative values, unit costs or service under a variety of conditions, and the human and economic benefits to be gained by combinations of alternative types and levels of service.
>
> The formulation of objective, measurable relationships between health services and other development efforts, so that the cross relationships between, for example, so much manpower and so many dollars spent in achieving a measured morbidity reduction can be assessed for its effects on so much increase in agricultural production, and vice versa.
>
> The training and cross-fertilization of health care planners (not solely health professionals, but also economists, sociologists, systems analysts, and administrators) from both the private and public sector.

The conceptual strategy inherent in this paper addresses the need for a better understanding of the critical inter-

*Office of Annuity Planning, Ministry of Health and Social Affairs.

dependencies between health and economic development on the part of those engaged in national planning processes. Through this strategy, health planners will have to acquire the discipline to recognize the imperative of making their claims on national resources in terms of efficiency and equity, and in a manner persuasive to economists and other non-medically trained policy-makers concerned with overall societal planning in Korea. In turn, those Koreans trained in economics and economic development have to be encouraged to focus their professional talents on health sector planning, organization, financing, administration and management. The process, then, by which the objectives of the loan are pursued is intimately related to evolving national health policy initiation.

2. Project Beneficiaries

This project will be of direct benefit to the poor majority of Korea, and is designed to fulfill the Congressional Mandate embodied in the Foreign Assistance Act of 1974 for the promotion of low-cost innovative health delivery to deprived populations. Its primary objective includes increasing equitability in access to health care, and enabling subsequent replication of the success achieved to other segments of the poor majority throughout Korea. As noted elsewhere, some lag between inputs and improvement of health status is to be expected; nevertheless this linkage will be direct, and the experience should lead to substantial reduction in benefit lag when the project is replicated.

3. Role of Women

Women will receive a proportionally large share of the benefits of this project insofar as the project's priority target group will be younger children and women of child-bearing age. They already play a larger role in the health profession than in most other fields and this trend is increasing. One obvious reason for this is that Korea has adopted the traditional Western practice of using primarily females in the profession of nursing (although, as is pointed out elsewhere in this paper, a nurse's active period of employment is usually no more than three years). But women also play a relatively large role as physicians, with some estimates that they represent as many as 20% of practicing physicians in Korea. As a general rule, women doctors concentrate in the specialties, particularly obstetrics and gynecology and pediatrics, with few of them employed as general practitioners.

Many of the providers of services under the proposed new system will be women and specific efforts will be made to increase the number of women health professionals in the demonstration project areas. It is anticipated that the role of "para-professional" will be particularly suited to women because of the traditional reluctance of many women in the target populations to seek medical help from male practitioners. It is also anticipated that many young women will find in this role a highly suitable way for them to fulfill their desire to pursue a socially useful and respected career. As more and more such practitioners appear in the field, it should accelerate the previously-mentioned trend for women to play an important role in the delivery of health services.

4. Environmental Soundness

The overall environmental impact of this project will be strongly positive. Learning and applying the principles of good sanitation will be stressed in the demonstration projects to be conducted under the health loan as a major means to better health. As this effort takes effect, the living environment of the demonstration areas first, and then of the rest of the country, will be greatly improved. An enhanced sanitation consciousness among the Korean population will speed the already evident growth of public concern for the country's environment.

One particular area of environmental concern in Korea should be specifically aided by an increased sanitation awareness -- that of sewage contamination in waterways. While this project will not do anything directly about such contamination, it should generate pressures among the population for action to reduce such contamination.

The adverse environmental effects of the project will be minimal and will consist solely of whatever marginal degredation occurs if some limited hospital construction is funded through the loan.

Thus, it is claimed that this project will have highly beneficial effects on the quality of the environment in Korea.

C. Administrative Aspects

1. Attitude of the Ministry of Health and Social Affairs

On April 15, the Minister of Health and Social Affairs, Mr. Koh, Jae-Pil, was presented with three options by his staff for the organizational structure of the proposed Corporation. The first two had the Corporation directly under the administrative and technical control of the Ministry, with one model varying slightly in terms of staff appointments. However, both models did not allow the Corporation to conduct its activities in a semi-autonomous atmosphere. The third model, presented in Section I, was the AID option. The Minister personally accepted the latter, while suggesting to his staff that the first two were inappropriate for the future needs of Korea. In a subsequent discussion with Mr. Koh (see Attachment V .), the Minister expressed an understanding and support for the concepts embodied in the program agreements between MHSA-EPB-AID.

2. Attitude of the Korea Medical Association

In a discussion with the President of the KMA, Dr. Choon Ho Sohn, on May 1, the Project Development Team was informed that the prime reason why physicians do not locate their practices in rural areas was due to the inability of the residents to pay their fee schedules. Dr. Sohn did not express any adverse attitudes toward the concept of Physician Extenders, saying the KMA had not yet really thought through its implications. He mentioned that some revision of the Medical Affairs law would probably be necessary before successful demonstration projects using Physician Extenders* could be more widely replicated. On the question of physician emigration, he felt this would soon decline as the U.S. and some other countries were changing their policies on admittance of foreign physicians. He said that some 5,200 Korean physicians were currently practicing outside the country.

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* See more detailed discussion of Physician Extenders on pages 57 and 88.

3. Staff Recruitment and the KHDC

The KHDC should embody sufficient independence and creativity to attract top-quality Korean professionals, both in Korea and abroad. Such attraction will most likely be found in a project that can enhance professional reputation and capability in a unique role and organization which proves to be a leader in its field. The KHDC will offer opportunities for conducting innovative research and demonstration activities in health and these should attract high quality professionals from both the private and public sectors.

It is anticipated that the KHDC will provide the climate requisite to the recruitment of a professional health staff not now attracted to this sector as presently structured in Korea. A more detailed explanation of why the Project Development Team feels this is possible can be found in Attachment XIII.

4. Community Acceptance and Participation

The Ministry of Health and Social Affairs is currently subsidizing 9 health insurance projects under the Medical Insurance Law. These projects are:

		Members
a.	Korea Oil Company	4,804
b.	Pong Myong Mine	2,302
c.	Korea Chemical Company	1,992
d.	Pusan Insurance Program	14,000
e.	Okgu Insurance Program	9,200
f.	Koje Community Medicine Corporation	3,436
g.	Chunseong Health Insurance Program	3,750
h.	Baikneondo Red Cross	8,250
i.	Yongdong Insurance Program	5,655
		53,389

The first three programs are industrially based, the fourth is located in Korea's second largest city, and

the remaining five are in rural areas. As noted earlier, the total national subsidy for all of these programs amounts to $53,100 annually, or 99¢ per capita. These subsidies can only be applied against costs of administration and management. All groups, whether industrially based or community based, must apply to the Ministry of Health for permission to cover potential members with medical insurance. Under the law, Government approval also requires that the Government pay the subsidy. While the Ministry would like to issue more permits to groups, it is restricted by current budget limitations.

In May 1974, only the first five groups listed above had permits to operate medical insurance schemes. The latter two have consumer-oriented enrollments. Since then, the remaining groups sanctioned by the Ministry of Health are all community based corporations. It is anticipated that community interest in sponsoring consumer-oriented health systems will continue to be expressed. There is obviously a need to amend the law to separate Government approval of insurance cooperatives from the requirement to provide each approved cooperative with a subsidy.

Attachment VI is an example of one local government's plan to turn health facilities and personnel over to a community based corporation.

D. Economic Analysis

Loan requests normally are supported by economic analyses employing benefit/cost (B/C) or internal rate of return (r) calculations. Such calculations are deemed inappropriate in this instance for the following reasons:

1. Calculation procedures are designed for assessment of capital projects which are intended to return quantifiable benefits for which money values may be imputed. The return of this project will be mainly unquantifiable benefits such as improved accessibility to health resources, beneficial behavioral changes and improvement in health status. There is no reliable state-of-the-art in economic assessment for quantifying this sort of benefit; all of the literature extant may be faulted in respect to production function linkages, which account for the major portion of health benefit in B/C or r procedures.

2. The returns from capital investment provide the means for social betterment and well-being. The returns of this project represent social betterment on their own accord. Attempts to quantify them for the purpose of estimating their social betterment potential would seem redundant.

3. Selection of the rate by which benefit and cost streams are discounted may in itself constitute a decision which controls or constrains improvement in economic or health status. In view of the continued controversy relating to discount rate criteria, the possible outcome of such selection is regarded as unnecessarily risky for a project of this nature.

4. This project concerns itself largely with establishing a viable mechanism for effecting research and demonstration on innovations in health care delivery. Decisions on major components of that research and demonstration -- such as site selection and population

size, manpower requirements, etc. -- are not made now, but will be made through the mechanism created in this project after operation commences. Consequently, few data are available for either cost or benefit calculation, and any proxies or shadows that might be imagined would be unrealistic.

Instead, there would seem to be greater relevance to this project of an economic analysis touching upon the relationships between poor health and poverty in Korea; diseconomies inherent in current patterns of health resource utilization, and potential savings associated with new approaches to health care delivery that this project will promote. Without attempting benefit cost calculations, the following discussion provides the basic economic justification for the proposed project.

1. Health/Economic Status

Economic assessment for this project derives from present health-related economic status of typical target populations. Probably the most definitive profile of present status is found in a baseline survey of 1,200 households commissioned through the MHSA by the World Health Organization preliminary to commencement of their Yongin Gun pilot project.* The area selected for the survey is probably similar in major respects to the site eventually chosen for this AID project.

The survey found that:

-- Environmental sanitation is generally poor. Most houses have poor ventilation and poor water drainage. Breeding places for disease carriers abound in open-

*Household-Oriented Community Survey, Yongin Gun, Kyonggi-do November 22-December 11, 1972 (MHSA: General Health Services Development Project, Korea 4001). This was a 7% sample survey of 1,200 out of 17,469 households in Yongin Gun.

pit latrines, haphazard garbage disposal and animal stalls. Unsanitized human excreta is generally used as fertilizer, alone or in combination with compost.

-- Most wells and water pumps are unsatisfactorily close to contamination, and only 3% are covered. Chlorination is poor. Water is properly stored in one-quarter of households, and is taken without treatment in more than half.

-- Facilities for medical care were limited. For lack of access, physical and financial, about 77% of acute disease cases and 60% of chronic cases remained untreated, and 83% of the latter group had never received treatment.

-- Many of the most common diseases (shown below) were clearly preventable:

Acute: Infectious and parasitic (75%), digestive system (10%), badly-defined (4%) and respiratory system (3%).

Surgical: Digestive system (32%), nervous system and sensory organs (16%), complications of pregnancy and childbirth (13%), accidents (12%).

Chronic: Digestive organs (27%), nervous system and sensory organs (23%), respiratory system (13%), circulatory system (11%), infectious and parasitic (8%).

-- Nutrition is inadequate. Most households never consume eggs (75%), consume fish and chicken less than once a week (74%) and consume beef and pork less than once a month (70%). Least-consumers of one form of animal protein are also least-consumers of other forms. Rice and barley are the main foods.

-- Houses are overcrowded, there is little cash income and relatively high expenditure, savings are limited and debts are high. Fewer than 10% own motorized vehicles.

-- Three-quarters of acute disease sufferers were not treated at medical institutions but rather took medicines prescribed by druggists or recommended by friends. Expenditures during the survey period for acute conditions were less than 500 won in 55% of cases treated, and at most 1,000-2,000 won (7%). The other one-quarter sought treatment in hospitals (54%), clinics (36%), by herbalist (7%) or in health centers (3%).

-- 58% of respondents did not receive preventive or promotive information from health center or sub-center personnel. Advice on immunization was received mainly from village chiefs or friends (79%) rather than health personnel. One response was positive; 88% of pre-school children had received some or all of the immunizations that had been recommended.

-- 83% to 86% of women pregnant within the previous three years received no antenatal or post-natal advice or care. Six percent of births were unattended and 79% were attended only by relatives or neighbors. Fewer than 12% were attended by midwife or physician. Over 15% of the households surveyed had experienced at least one spontaneous abortion. 90% of households with children under two years had never received routine well-baby care or checkup.

-- Expense deterred one-third of the sick from seeking any sort of treatment.

Scant information exists for comparing this profile of rural health status with that of urban areas. The only sample survey available, in a study by Huh and Park in 1973,* provides the following comparisons in Table III-1:

*Huh, Jong and Park, Young Soo: "A Study of Medical Care Expenditure" (Seoul National University, School of Public Health, 1973). The study included 5,985 households and 30,525 persons during August 1973.

TABLE III-1

KOREAN HEALTH ECONOMIC INDICES, 1973

	Large City	Medium City	Town	Rural Area
Population 60 years or over	3.0%	1.5%	3.0%	5.3%
Persons/house	4.64	4.58	4.64	5.65
Aver. monthly expenditure per household (₩)	1,905	1,683	1,333	955
Aver. monthly expenditure per capita (₩)	410	361	236	176
Morbidity rate (monthly aver.)	20%	23.9%	20.4%	11.5%
Ratio, sick call to sickness	74.8%	86.9%	57.4%	85.1%
Treatments per illness	1.8	0.7	1.4	0.9
Days medical care/case	11.8	10.3	12.4	9.3
Aver. medical cost per case (₩)	2,049	1,508	1,158	1,328
"Inability to pay" as cause for lack of treatment	14%	6%	13%	49%

Where do people generally go for treatment? In large cities, according to Huh and Park, 48% turn to the pharmacy and 29% to outpatient facilities on first visits, but drop off on subsequent visits in favor of oriental pharmacies and practitioners, and folk-medicine. There is a similar but more dramatic trend in towns, where virtually everyone seems to abandon scientific medicine for oriental by the third visit. In rural areas, however, the reverse is evident; while only 37% turn first to pharmacy and 36% to outpatient facility on first visit, these percentages rise on subsequent visits, and attendance by oriental pharmacists and practitioners, as well as physician home visits, drop off.

These studies reinforce a household survey of sickness in rural areas by Huh and others in 1971.* In this earlier study, home ownership was enjoyed by 90% of rural households, averaging 5.5 persons. But homes were modest -- 16% contained only one room, 46% had two, and 26% had three. About 80% of the households surveyed drew water from wells, another 18% used pumps. Over 40% owned no cultivatable land, another 26% owned fewer than 50,000 square meters. Diseases of the respiratory system accounted for 61% of illnesses reported (according to WHO International Classification of Disease categories), followed by digestive system (36%), nervous system and sense organs (14%) and infectious and parasitic diseases (11%). Again, the pharmacy was most often sought for care (by 56%), outpatient clinics next often (12%), folk medicine and superstition (11%), herbalists (10%), and health centres (7%).

Therapeutic expenditures in this study averaged ₩ 802 per treated case, ₩ 473 per household, and ₩ 86 per

*Huh, Jung; Park, Young-Soo; Kim, Jong-Kun; Kim, Kyoung-Sik; and Lee, Young-Choon: "Studies on Sickness and Utilization of Medical Care in Korean Rural Areas". "Rural" in this study excluded the 32 leading cities, so included towns below 50,000 population. The survey month was January 1969.

capita during the survey month. We are not informed how many sick persons went untreated; but 58% of that number attributed non-treatment to lack of money, 25% said their pain was endurable, and 15% awaited either spontaneous cure or deterioration of condition before seeking assistance. As the study notes, the latter two reasons may also be money-related.

These studies reflect the usual health circumstances of rural persons in developing countries. They live in crowded quarters, lack elementary sanitation, may practice unsanitary activities, do not benefit from preventive advice or facilities, have little cash flow and few possessions, often refrain from medical attention because of its cost or delay seeking attention until their conditions worsen and become more expensive to treat; and when illness strikes, their situation most often compels them to consult pharmacists and others untrained in medical problems whose capability extends only to relieving symptoms or masking true causes of disease. These circumstances serve to constrain severely both improvement of individual health status and optimal maintenance of worker productivity.

2. Cost Reducibility through Prevention

Such unfortunate circumstances strike a tragic note in regard to conditions that are unnecessary, or worse than they need be. Several of the most common afflictions in rural Korea fall into this category, as illustrated in the following tables. Although exact rank order of causes of morbidity and mortality were not available to the Team (obtaining such baseline data may in fact be contemplated under this project), some clues are afforded through these illustrations.

Table III-2 lists the twenty most prevalent conditions found in an August 1973 baseline study for the Seoul National University project in Chunseong Gun. Data

TABLE III - 2

Multiphasic screen of random sample of Chungseong Gun Project residents age 15 and over (Prof. Kim, Jung Keun, 1973*)

(N=1200, 70% response)

	Number of cases
Diseases of nervous system (mostly neuralgia)	171
Anemia (mostly iron-deficiency)	106
Gastritis and Duodenitis	98
Avitaminosis, other nutritional	77
Respiratory (mostly emphysema)	71
Hypertensive heart disease	58
Circulatory, other than cerebrovascular	52
Hypertension without symptoms	48
Genito-urinary (mostly trichomonis)	46
Muscular-skeletal deformities (mostly accidental)	33
Tuberculosis	32
Nontoxic goiter	30
Otitis media and mastoiditis	28
Diarrhea, enteritis, etc.	24
Other digestive	19
Eye inflamation	18
Arthritis and spundelitis	17
Peptic ulcer	15
Chronic rheumatic heart	12
Neurosis	11

*Note: 64.5% of the respondents in this sample were found to have at least one acute or chronic illness or disability.

were collected through multiphasic screen, but regrettably limited to "working age population" -- persons age 15 and older (thus excluding the more vulnerable half of the gun inhabitants).

Table III-3 represents a composite of the 20 most prevalent causes of morbidity and mortality according to recent opinions of 141 health center directors. They were taken from a list of 45 specified illnesses, which unfortunately excluded conditions related to pregnancy and birth as well as other important conditions not frequently reported to health centers (as mentioned above, half to three-quarters of all rural patients refer to druggists for primary care, and only a minority to health centers).

Table III-4 is a list of postulated reductions in mortality among aging Americans that might be achieved through proper use of available knowledge. This list includes many conditions that are also cited above as major health problems in Korea. Some of the "suggested actions" in this table require physician attendance, but many could be carried out with equal efficacy by Physician Extenders, perhaps graduates of "Medex" type training. Proper screening by Physician Extenders could achieve further savings by optimizing utilization of physician manpower in the "suggested actions".

After the size and health status of the project population are determined, procedures used to generate Table III-4 can be applied towards quantifying reductions in mortality and morbidity to be expected through specified project activities. This information would be essential input data for a calculation of economic benefit, if this is later desired.

TABLE III - 3

Opinion of 141 Health Center Directors as to twenty Leading Causes of Morbidity and Mortality in Korea, based on health center consultations*

Morbidity:	Mortality:
Common cold	Apoplexy
Gastritis	Hypertension
Bronchitis	Tuberculosis
Arthritis, neuralgia	Traffic accidents
Hypertension	Pneumonia
Tuberculosis	Gastritis
Dermatitis	Neoplasm
Peptic ulcer	Malnutrition
Colitis	Hepatitis
Hemorrhoid	Peritonitis
Pneumonia	Toxemia of pregnancy
Pelvic inflamation	Peptic ulcer
Otitis media	Asthma
Food poisoning	Nephritis
Dysentery	Diabetes
Cardiovascular diseases	Food poisoning
Nephritis	Bronchitis
Venereal diseases	Liver abscess
Traffic accidents	

Source: Dr. Moon, Ok Ryun, Seoul National University School of Public Health, April, 1975.

*Note= From list of 45 conditions commonly referred to health centers. List did not include conditions related to birth and others treated outside.

Table III-4a

Postulated reductions in deaths among aging populations in the U.S. if all available knowledge were used (From: Hanlon, John J., Principles of Public Health Administration, Table 7-5, based on a study by V.N. Slee)

Cause of death	*Reduction (%)*	*Suggested action*
Rheumatic fever	95	Best possible physician Prophylactic antibiotics
Diabetes mellitus	60	Best possible physician Intensive early case finding Diet Insulin Applied genetics
Diseases of thyroid gland	100	Best possible physician Newer drugs Surgery Iodization of all salt
Nutritional diseases	100	Adequate diet Diagnosis and treatment
Alcoholism and addictions	25	Psychiatry Nutritional therapy Sociology Education
Intracranial vascular lesions	10	Best possible physician Antihypertensive drugs and diet Anticoagulants Avoidance of infections Antibiotics
Diseases of the heart	10	Best possible physician Surgery
Pneumonia, broncho-	75	Chemotherapy Antibiotics
Pneumonia, lobar	90	Chemotherapy Antibiotics
Pneumonia, unspecified	75	Chemotherapy Antibiotics
Influenza	85	Immunization Chemotherapy and antibiotics for complications
Peptic ulcer—stomach and duodenum	50	Psychiatry Best possible physician
Diarrhea, enteritis, etc.	95	Environmental controls Chemotherapy Antibiotics

Table III -4b

Postulated reductions in deaths among aging populations in the U.S. if all available knowledge were used (From: Hanlon, John J., Principles of Public Health Administration, Table 7-5, based on a study by V.N. Slee)

Cause of death	*Reduction (%)*	*Suggested action*
Typhoid and paratyphoid	100	Environmental measures Immunization Epidemiologic control
Meningococcal infections	100	Control of epidemics Adequate and early chemotherapy Antibiotics
Streptococcal infections	100	Chemotherapy Antibiotics Antitoxin
Whooping cough	100	Early and thorough immunization Hyperimmune serum, chemotherapy, and antibiotics for secondary infections
Diphtheria	100	Early immunization and adequate antitoxin
Tuberculosis—all forms	100	Intensive early case finding Hospitalization and treatment Adequate diet and housing
Dysenteries	100	Environmental control Chemotherapy
Malaria	100	Environmental control Chemotherapy
Syphilis	100	Intensive early case finding Treatment Epidemiologic control
Measles	100	Immunization Chemotherapy Antibiotics
Poliomyelitis	100	Immunization
Neoplasms	50	Early cancer detection and treatment centers Best possible physician and surgeon Chemotherapy Radiation therapy Surgery Circumcision Elimination of smoking

*Where chemotherapy and/or antibiotics have been listed as the explanations for the reductions in deaths, objection on the basis of the development of drug-resistant organisms will no doubt be raised. Gains possible today might be much less in a few years. It is felt that research will be able to remain one or two drugs, at least, ahead of the organisms.

With the one exception (all other causes) no variation of effectiveness of therapy and other control measures with age of the individual has been postulated. Since any scheme of correction would probably have been as liable to criticism as no correction, the latter course was followed.

Continued.

Table III-4c

Postulated reductions in deaths among aging populations in the U.S. if all available knowledge were used (From: Hanlon, John J., Principles of Public Health Administration, Table 7-5, based on a study by V.N. Slee)

Cause of death	*Reduction (%)*	*Suggested action*
Appendicitis	100	Surgery Chemotherapy Antibiotics
Hernia, intestinal obstruction	95	Best possible physician and surgeon
Cirrhosis of the liver	25	Newer nutritional knowledge
Biliary calculi	25	Best possible physician and surgeon
Nephritis and nephrosis	25	Chemotherapy Antibiotics Best possible physician
Diseases of the prostate	50	Best possible physician and surgeon
Complications of pregnancy	87	Complete elimination of deaths from toxemia and sepsis, and reduction of deaths from hemorrhage by 50%
Congenital malformations	10	Diet during pregnancy Avoidance of viral infections during pregnancy Surgery (as in recent heart and blood vessel operations)
Premature births	70	Adequate prenatal care and diet
Suicide	50	Psychiatry Sociology
Homicide	50	Psychiatry Sociology
Accidents—motor vehicle	50	Education Psychiatry Engineering Traffic planning and control Safety measures
Accidents—other	50	Education Psychiatry Safety measures Engineering
All other causes	50	Better medical care (except for under 1 year, where deaths from congenital debility, birth injury, and others peculiar to the first year of life could be reduced by 75%), adequate prenatal care and diet, and adequate care during first year of life

This observation is reinforced by the observations of Professor Kim, Jung Keun, who tabulated the Chunseong Gun data. Nearly two-thirds of the persons screened showed positive acute or chronic conditions. Approximately 50-60% of these, according to Professor Kim and his associate, Prof. Kim, Joung Soon,* could have been prevented if patients had access to sufficient funds. Half of these, 25-30% are said to have been preventable within current income levels if proper preventive and primary care had been available. In particular, Prof. Kim noted that many persons were found to be suffering pterygium, a progressively blinding eye inflammation preventable through simple cleanliness and attention.

Until now Korea has attempted to resolve these service deficiencies by emphasizing expansion of public hospitals, and by attempting to lure more physicians into rural areas. In the opinion of the Project Team, both endeavors will prove to be excessively expensive and unsuccessful in reaching low-income populations.

3. Malutilization and Underutilization of Hospitals

We estimated earlier that perhaps 5% of rural Koreans choose hospitals as their first medical contact when sickness strikes, based on the few surveys extant. To our knowledge, hospital in-patient and out-patient admissions in Korea have not been analyzed; however, it is evident that this percentage includes:

*Kim, Joung Soon, "Interim Resume on the Research, 'Health Survey on Adult Inhabitants of the Chunseong Gun Area'" March 3, 1975 (unpublished).

a. Conditions that could have been treated equally well by allied health workers trained to or below the level of registered nurse.

b. Conditions that might have been treated adequately by allied health personnel in earlier stages, but were neglected until serious enough to require more expensive attention.

c. Emergencies and serious conditions requiring immediate physician care.

In the opinion of local scholars, category c. may account for half or fewer of total hospital admissions. Table III-5 shows that a trend appears to be underway toward more rational hospital utilization, but it seems to result as much from changing patterns of disease incidence as from behavior changes; and because it is a very gradual trend, considerable malutilization persists. In any event, the choice for hospital is generally made by patients or their families, rarely on medical referral. Few of these patients are screened by qualified health workers; so hospitals and personnel are burdened with patients who don't belong there and are unprepared for those who do. Part of a proper screening function is efficient marshalling of health resources appropriate to serious cases. This function is badly lacking in Korea and virtually non-existent in rural areas.

It is also evident from community surveys cited that many chronic patients are unattended or poorly attended in or out of hospital, and that many persons who might benefit from hospitalization do not, owing to:

a. Inability to pay. As in the United States, Korean hospitals have experienced price inflation far exceeding the general rise in cost-of-living. In Seoul, hospital and physician costs increased 718%

TABLE III.5

Number of Cases Reported at Hospitals, Health Centers, Private Clinics, and Other Modern Medical Facilities for a One-Month Period

Diseases	1966	1973	%change
Infective & parasitic diseases	6,850	5,114	- 25.3
Neoplasms	805	1,942	+141.2
Endocrine, nutritional & metabolic diseases (blood and blood-forming organs)	1,525	906	- 40.6
Mental disorders	1,835	1,818	- 0.9
Diseases of the nervous system and sense organs	5,286	4,260	- 19.4
Diseases of the circulatory system	1,425	1,714	+ 20.3
Diseases of the respiratory system	9,542	11,081	+ 16.1
Diseases of the digestive system	19,371	12,367	- 36.2
Diseases of the genito-urinary system	4,712	4,135	- 12.2
Complications of pregnancy, childbirth, and the puerperium	909	3,432	+277.6
Diseases of the skin and subcutaneous tissue (musculo-skeletal system & connective tissue)	7,118	5,339	- 25.0
Anomalies	47	201	+327.7
Certain causes of perinatal morbidity and mortality	188	134	- 80.2
Symptoms & ill-defined conditions	3,632	718	- 80.2
Accidents, poisoning & violences	6,445	7,292	+ 13.1
Total	69,690	60,453	- 13.2

Source: National Sickness and Injury Survey, MHSA, 1973.

Note: (1) Chronic diseases and accidents are increasing.
(2) Infections and parasitic diseases are decreasing.
(3) Pattern is similar to developed countries, but change is very slow.

between 1965 and 1969, against a general inflation of 277% during those years,* and there is no way at present to keep health costs in check. Indeed, some hospitals are reported to be charging what traffic will bear, and all charge higher than market price for pharmaceuticals. Comparable figures are not available for rural areas, but we are assured by local scholars that they experience similar inflationary pressures, which materialize partly in price escalation and partly as hidden costs through service deterioration. It is also clear from a comparison of rural hospital charges with rural family income -- and from the paucity, inadequacy and diseconomy of private health insurance in Korea -- that hospital care is beyond the reach of most Korean rural families.

b. Inadequate institutional capability. Hidden inflation, plus the customary manpower deficiencies (maldistribution of physicians and short work-life of nurses) leave rural hospitals poorly staffed and poorly equipped for modern medical practice. We are informed that public hospitals are far worse off than private hospitals in this regard.

c. Inaccessibility. Transportation in rural areas is inadequate for many persons to reach hospital, and fewer than 10% of rural families own motorized vechicles.

d. Poor outpatient services and inefficient outpatient processing.

Table III-6, based on a 1973 survey of 181 hospitals, indicates mean bed-occupancy rate outside Seoul to be around 36% for public hospitals and 42% for private. Forty-four hospitals, about one-fourth those surveyed, showed a mean bed-occupancy rate below 20%.

*An, Young-Sap, Korea Times, March 4, 1975.

TABLE III. 6
Hospitals in Korea Classified to Show the Occupancy Rate of Beds Available
1973

Type of Hospital and Location	Number of Hospitals Reporting	Mean Rate of Occupancy	Number with Occupancy Rate of			
			0-19%	20-49%	50-79%	Over 80%
Government						
In Seoul	14	65.0%	0	5	5	4
Outside Seoul	44	36.1%	10	25	7	2
Total	58	43.4%	10	30	12	6
Private						
In Seoul	42	51.2%	11	13	8	10
Outside Seoul	81	41.6%	23	33	16	9
Total	123	44.9%	34	46	24	19
Grand Total	181	44.4%	44	76	36	25

Source: Statistical Year Book of Ministry of Health and Social Affairs, 1973.

At best, hospitals offer only curative services and do nothing to prevent occurrence of many illnesses they are called upon to treat. Obviously there is crying need for health planning and hospital utilization review in Korea. When that need is filled, the Project Development Team feels confident that the ROKG will no longer place primary emphasis on hospital expansion for reaching underserved populations.

4. Manpower Shortages and Market Regulation

A 1972 survey of 1,973 townships in Korea reported that 549 lacked a physician.* A 1974 pre-investment survey commissioned by the IBRD reported that: "The number of physicians in the country is so small in the aggregate that the possible contact between a physician and members of the general population is very limited. With 60 percent of the physicians concentrated in the major cities, a visit between a doctor and a patient in the rural areas does not occur more often, on the average, than once every two or three years."**

Manpower projections based on MHSA estimates indicate serious and rapidly worsening shortages of physicians and nurses in the future, as shown in Tables III-7 and III-8. Furthermore, GNP is predicted to increase by 3.7 times, and per capita GNP by 3.3 times, by 1981 over 1972.*** To the extent this rise is not offset by inflation, it will provide the basis for considerable additional demand pressure for professional health personnel and upward pressure on physician care prices beyond current projections.

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*Report from Korea University, 1974 (unpublished).

**Academy for Educational Development, Inc., "Future of Education for the Health Professions in Korea", for the Korean Ministry of Education supported by the International Bank for Reconstruction and Development (March 31, 1975)

***Economic Planning Board, The Korean Economy -- Past and Future (June 1973).

TABLE III.7

Estimated Demand for and Supply of Medical Doctors
1973 - 1981

Year	Total Population (unit 1,000)	Demand	Ratio of Population	Supply	Estimated Shortage
1973	32,884	18,995	1,729	17,528	1,467
1974	33,307	21,289	1,566	18,426	2,863
1975	33,837	23,681	1,429	19,362	4,319
1976	34,345	26,184	1,329	20,417	5,767
1977	34,826	28,808	1,209	21,603	7,205
1978	35,314	31,565	1,118	22,810	8,755
1979	35,773	34,472	1,038	24,017	10,455
1980	36,238	37,538	965	25,224	12,314
1981	36,709	40,736	900	26,431	14,305

Source: Third and Fourth Five-Year Health Manpower Plan, Ministry of Health and Social Affairs, 1974.

TABLE III. 8

Estimated Demand for and Supply of Nurses
1973 - 1981

Year	Total Population (unit 1, 000)	Demand	Rate of Population	Supply	Estimated Shortage
1973	32, 884	23, 976	1, 370	21, 701	2, 275
1974	33, 337	29, 422	1, 133	24, 683	4, 739
1975	33, 837	35, 215	904	27, 652	7, 563
1976	34, 345	41, 416	829	30, 609	10, 807
1977	34, 826	48, 098	724	33, 554	14, 544
1978	35, 314	55, 345	638	36, 487	18, 858
1979	35, 773	63, 258	566	39, 408	23, 850
1980	36, 238	71, 954	503	42, 317	29, 637
1981	36, 709	81, 572	450	45, 214	36, 358

Source: Third and Fourth 5-Year Health Manpower Plans, Ministry of Health and Social Affairs, 1974.

Note: 1) Nurse aide program is not included in supply.

Shortages of primary contact physicians may increase more rapidly than those for all physicians, owing to the fact that nearly half of all non-military M.D.'s currently licensed in Korea are broad specialists (one-fourth of them surgeons).

Shortages of nurses may increase more rapidly than projected to the extent that current pressure for degree-nurse training is successful. With prime marriage age at 23 years for Korean women, and in view of current custom, increasing nurse training by one year reduces the professional life of those nurses affected by one-third. Eventually, it may be easier for married women to find work in Korea; but even this will not make up the deficit occasioned by degree-nursing because of the increasing secondary demand pressures arising out of simultaneously worsening shortages of physicians, particularly in view of increasing disposable personal income.

All of these projected shortages and demand pressures will be exacerbated by continued market regulation of health personnel. Two forms of market regulation severely constrain access to health care in Korea, and add considerable inflationary pressure to health care costs:

a. Restriction of non-physicians in latitude of practice. There are professional reasons, based on competence and responsibility, for limiting the extent to which nurses and allied health personnel can prescribe and administer medical care. However, non-physicians in Korea are permitted far less professional responsibility than their counterparts in the United States. On the basis of numerous discussions with scholars and professional organizations in Korea, the team concludes that non-physicians in Korea are unduly circumscribed, and that much of the regulation that exists pertains less to professional competence and responsibility than to a desire by physicians to maintain high income through market restriction.

b. Among industries enjoying market domination, it is common practice to control domestic supply below effective demand levels through export activity, for the purpose of maintaining artificially high domestic prices. The pharmaceutical, lumber, grain and copper industries are excellent examples in the United States. In Korea the export mechanism operates to dampen physician supply and thus maintain physician prices immune from domestic supply/demand pressures, at levels which are too high for most Koreans. Whether other countries will introduce more restrictive policies and reduce the outflow of Korean physicians remains to be seen.

Local observers report that the competition which causes Korean physicians the greatest apprehension is not that of other physicians so much as that from auxiliaries and druggists. Competition from auxiliary practice has been effectively checked through excessively restrictive legislation. However, diagnosis and treatment by druggists persist and this is at present the chief threat to physician income in a country where the right of physicians to "charge what the market will bear" is unquestioned. As in 19th century England, druggists are the practitioners of first resort for most Koreans,* and for the next decade at least they are the only category of health manpower where supply will continue to exceed demand (Cf. Table III-9).

Current policies in Korea seem to encourage physician export, especially as a means of improving foreign exchange earnings. The Korean Medical Association reportedly

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*In England this resulted in legitimization of practicing druggists, as forerunners of today's family physician, through vigorous backing of the Apothecary Act in the mid-nineteenth century.

TABLE III-9

ESTIMATED DEMAND AND SUPPLY OF PHARMACISTS 1973-1981

Year	Total Population (Unit 1,000)	Demand	Ratio of Population	Supply	Excess
1973	32,884	15,200	2,163	15,900	700
1974	33,337	15,874	2,100	16,600	726
1975	33,837	16,919	2,000	17,300	381
1976	34,345	17,173	2,000	18,000	827
1977	34,826	18,329	1,900	18,700	371
1978	35,314	18,586	1,900	19,400	814
1979	35,773	18,827	1,900	20,100	1,273
1980	36,238	20,132	1,800	20,800	668
1981	36,709	20,394	1,800	21,500	1,106

Source: 1971 and 1973 reports of MOST, MHSA. Projections based upon production of medical schools as reported by the schools and estimates by the Academy for Educational Development.

supports this trend, and it has recently organized a branch of the KMA in New York. Immigration policy in the United States grants preferential admission to physicians. Together, these policies encourage a drain of considerable magnitude;* worse yet, by protecting such opportunity, they attract medical students into specialties designed for American practice but unsuited to medical needs in Korea.**

Any suggestion that physician supply can be increased adequately or that sufficient numbers can be attracted to the countryside is at odds with these overwhelming market forces. Nurse supply is similarly dampened; despite projections of worsening shortages, and despite high turnover, 31% of registered Korean nurses are abroad under Government sanction in order to supplement foreign exchange earnings. Under present circumstances it seems unrealistic to believe that health care for rural Koreans will improve without rapid training and deployment of primary care personnel below the level of physician. For further discussion of these issues, refer to the sections on Physician extenders and Emigration of Physicians on pages 57 and 58 of this paper.

5. Supply Cost

Aside from the probability that matching demand for the supply and equitable distribution of physicians is impossible for Korea within the foreseeable future, there are also persuasive reasons of economy for giving immediate preference to rapid training of non-physician primary health care personnel.

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*According to Kwon, E. Hyock, 13% of all Korean medical school graduates were practicing abroad up to 1968. ("Educational Policies for Health Care", 14 Journal of the Korean Medical Association 36 (May 1971).) Currently, about 32% of all Korean-educated physicians are practicing abroad (MHSA data).

**From 1970-73, the ratio of specialists increased by a factor of 62% over primary care physicians who were granted Board Approved Specialists licenses.

As indicated elsewhere in this report, half to three-quarters of disease in rural Korea can be prevented or treated by persons competent at the "Medex" level. It is economically wasteful to assign these tasks to high-cost physicians and to absorb so much expense in physician training for tasks within the ability of personnel trained for a fraction of that cost.

According to Table III-10, paramedical personnel are currently trained for less than one-eighth the annual cost of physicians. The total cost of graduating two-year primary care workers, even allowing for startup costs, would be on the order of one-fifteenth the total cost of educating a physician; or restated, 15 or 16 primary care personnel can be trained for the same cost as one physician, and twice as fast. Even greater savings in recurring costs are possible through the utilization of primary care workers in lieu of physicians in activities where desired medical outcomes can be achieved through either approach. The time-cost for treatment by physicians is on the order of seven times as great as that projected for primary care workers, at current estimated income levels.

There is a related reason for preferring large-scale training of non-physician primary care personnel. A recent sample survey of Korean medical faculty, by Dr. Roberta Rice for the American Public Health Association,* indicates considerable dissatisfaction with physician education and curricula. Among the findings:

a. Disproportionate emphasis on diseases more commonly seen outside Korea and less emphasis on national health problems.

b. Imitates and imports many overseas medical problems which do not fit Korean situation.

c. Many English texts unrelated to Korea's health needs.

d. Faculty concerned about training basic scientists (rather than clinical scientists and practitioners), and faculty subject to conservative social customs which limit behavior toward change.

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*Rice, Roberta: "Medical Education in Korea: Needs and Opportunities" (American Public Health Association, mimeo 1973). This was a 10% random sample of 109 faculty members of the 14 Korean medical schools, with 82% response.

TABLE III-10

ESTIMATED TOTAL ANNUAL EXPENDITURES FOR VARIOUS TYPES OF EDUCATION FOR THE HEALTH PROFESSIONS IN KOREA IN 1974

Educational Field	Number of Students	Per Student Costs	Total Costs ₩ (000)
Medicine	4,740	1,600,000	7,584,000
Dentistry	675	400,000	270,000
Nursing (B.S.)	2,500	220,000	550,000
Nursing (Dip.)	7,014	150,000	1,052,100
Pharmacy	3,929	200,000	185,800
Public Health	107	424,000	45,368
Para-medical	3,893	178,000	692,954
Total	22,858	----	10,380,222

Source: Estimates by the Academy for Educational Development for the IBRD-supported pre-investment study of health education, op. cit.

Note: Includes only first professional degree or diploma; pre-medicine and pre-dental students not included.

e. Curriculum content is unconcerned and unrelated to patients' personal feelings, or students' emotions, or to the behavior of either; is not based on Korean medical statistics; and does not include learning in behavioral or social sciences.

Obviously there is considerable additional wastage in education of this type as far as Korean patients are concerned.

Efficient utilization of non-physician primary care personnel, for that majority of preventable or easily treatable diseases, depends on effective rationalization of service delivery and appropriate referral linkages. These are problems currently being addressed under the AID health planning grant, and they will receive attention during the period of the proposed health loan.

E. Financial Analysis

1. Fiscal Plan and Obligations

From the Project Budget Summary, Expenditures and Costing Output tables which follow, it can be seen that a plan has been adopted whereby AID and the ROKG each contribute seventy-five percent (75%) and twenty-five percent (25%) respectively for all of the expenditures for each fiscal year, resulting in a three-to-one ratio for the entire cost of the Project. Local currency necessary for loan-financed local costs will be generated through Special Letters of Credit tied to the purchase of U.S. goods, and provided on a reimbursement basis. For furtner discussion, refer to AID Disbursement Procedures on p. 84 of this paper.

Other donor contributions have not been identified on the Project Budget Summary in that, while other agencies have already expressed considerable interest in participating in the work of the new Project-related institutions, no fiscal commitments have yet been made. Nor have any funds from the USAID/Korea Health Planning Grant been included in the following fiscal tables, albeit a close working relationship is currently

anticipated. It should be once again noted that no AID costs have been added for the payment of direct-hire AID representatives although the estimated costs per year have been included in brackets. It is assumed that such expenditures will be covered from other AID sources. Sufficient funds have been earmarked in the Technical Assistance categories to insure that a loan-funded full-time U.S. advisor can be made available for those years when a full-time direct-hire person is not present.

Two additional financial tables are attached to the PP. The first, Attachment VIII presents a summary of expected annual fiscal obligations of AID and the ROKG by fiscal year and by major category of expenditures, i.e., the KHDC, Demonstration Project Costs, and the Secretariat. The second table in Attachment IX provides an estimate of Project costs in local and U.S. currency by the above three categories and for the major areas of expenditure, i.e., personnel, equipment, travel, and so forth. It should be emphasized that these are preliminary estimations and are subject to readjustment during the period of loan negotiations.

From the tables presented, it will be noted that the major Project expenditures can be expected to be for the support of field demonstration activities. The Demonstration Project budget totals $4,885,700, or seventy-three (73%) of the total Project costs or ninety-eight percent (98%) of AID's contribution. Capital construction is to be sharply limited to the addition of essential health facilities and in-patient beds in the major demonstration area only. Such construction will occur only after detailed and objective research to determine actual needs. It is expected that such construction, if required, will be on the order of a total of $120,000, or less than two percent (2%) of the Project costs.

PROJECT BUDGET SUMMARY
(In $000 or equivalent)

___ PID
X PP

Country Korea
X New
___ Rev. #___

Proj. #_____ Title Korean Health Demonstration Loan

1. AID Appropriated Dollars by Functional Approp. Category	FY 1976	FY 1977	FY 1978	FY 1979	FY 1980	Total all years
A. **Health and Population**						
Grant						
Loan	370	702	1,249	1,334	1,345	5,000
B. _____						
Grant						
Loan						
C. _____						
Grant						
Loan						
D. Total AID Appropriated Dollars	370	702	1,249	1,334	1,345	5,000
a) **Dollar expenditures**	113	285	277	121	66	862
b) **Dollars converted to local currency**	257	417	972	1,213	1,279	4,138
Total Loan	370	702	1,249	1,334	1,345	5,000
2. Other U.S. Costs, Total						
AID Guaranty						
PL 480, Title II						
_____						
Total Other U.S.						
3. Host Country, Total	123	235	416	445	448	1,667
4. Other Donors, Total						
5. Total Project Costs	493	937	1,665	1,779	1,793	6,667

ANNEX C

Country: Korea

X PP

X New

Rev. #

Project Expenditures
AID Appropriated Funds
(in $000 or equivalent)

Proj. # Title: Korean Health Demonstration Loan

Project Costs	FY 1976	FY 1977	FY 1978	FY 1979	FY 1980	Total all years
1. Direct Hire Personnel* (Proposed for funding by AID non-loan funds. Shown as "non-add" item)	(48)	(48)	(48)	(48)	(48)	(240)
2. Other Technical Services* (U.S. & 3rd. Country Contract Services)	65	65	65	65	64	324
3. [illegible] & Equipment U.S. Commodities	38	200	200	50	0	488
4. Capital Finance						
5. External Training	10	20	12	6	2	50
6. Other Costs (Local currency costs)	257	417	972	1,213	1,279	4,138
7. Total	370	702	1,249	1,334	1,345	5,000

* Up to 5 person-years of direct-hire services requested. If a full time direct-hire advisor is not available, $240,000 is included under buget for Other Technical Services to fund a full time contract advisor. (see text of PP for details).

Instructions; Enter projected expenditures for full year for all project specific inputs for the life of the project.

X PP

COSTING OF PROJECT OUTPUTS
(in $000 or equivalent)

Country Korea
X New
Rev. #

Proj. # _____ Title Korean Health Demonstration Loan

[X] Summary [ ] AID Approp. [ ] Other US [ ] H. C. [ ] Other Donors

Project Costs	Project Outputs				TOTAL
	KHDC	Demonstration Projects	National Health Secretariat		
1. Direct Hire Personnel U.S. (Non-Loan Funded) ~~Host Country~~ ~~Other~~	(240)				(240)
2. Other Technical Services (U.S. & 3rd. Country Contract Services)	337	62	5		404
3. ~~Commodities~~ U.S. Commodities	30	450	8		488
4. ~~Construction~~ Construction of small treatment facilities		120			120
5. External Training	67				67
6. Other Costs (Local currency costs)	947	4,254	387		5,588
7. Sub-Total					
8. Project Support Costs					
9. Total	$1,381	$4,886	$ 400		$6,667
Percentage of total	(20.7%)	(73.3%)	(5.9%)		(99.9%)

X PP

-49d-

COSTING OF PROJECT OUTPUTS

(in $000 or equivalent)

Country Korea

X New

Rev. #

Proj. # Title Korean Health Demonstration Loan

☐ Summary ☒ AID Approp. ☐ Other US ☐ H. C. ☐ Other Donors

Project Costs	Project Outputs				TOTAL
	KHDC	Demon-stration	Secre-tariat		
1. Direct Hire Personnel (Proposed for funding by AID non-loan funds. Shown as "non-add" item)	(240)				(240)
2. Other Technical Services (U.S. & 3rd. Country Contract Services)	269	50	5		324
3. [redacted] U.S. Commodities	30	450	8		488
4. Capital Finance					
5. External Training	50				50
6. Other Costs	687	3,164	287		4,138
7. Sub-Total					
8. Project Support Costs					
9. Total	$1,036	$3,664	$300		$5,000
Percentage of total	(20.7%)	(73.3%)	(6.0%)		(100.0%)

[X] PP

COSTING OF PROJECT OUTPUTS

(In $000 or equivalent)

Country: Korea

[X] New

[ ] Rev. #

Proj. #_____ Title: Korean Health Demonstration Loan

[ ] Summary [ ] AID Approp. [ ] Other US [X] H. C. [ ] Other Donors

Project Costs	Project Outputs				TOTAL
	KHDC	Demonstration	Secretariat		
1. Direct Hire Personnel U.S. Host Country Other					
2. Other Technical Services (Support of U.S./3rd country advisors)	68	12			80
3. Capital Structures & Equipment (Construction of small treatment facilities)		120			120
4. Capital Finance					
5. External Training (International travel/per-diem)	17				17
6. Other Costs	260	1,090	100		1,450
7. Sub-Total					
8. Project Support Costs					
9. Total	$345	$1,222	$100		$1,667
Percentage of total	(20.7%)	(73.3%)	(6.0%)		(100.0%)

It is reasonable to assume that the ROKG will have the resources to continue major Project activities following the conclusion of the Loan Project in FY 1980 in that the largest portion of expenditures are to cover the costs of demonstration project activities in the field. The KHDC and Secretariat can be expected to continue to have important roles to play in national health development with sufficient priority to insure that the approximately $200,000 per year needed to maintain these institutions will be forthcoming from the ROKG or other donors.

2. Prospects for Repayment

The economic analysis discussing prospects for repayment provided in Attachment X concludes that "the Korean economy should have no problem with undertaking this additional foreign exchange debt servicing burden. USAID further believes that ROKG revenues will be sufficient to provide budgetary resources for servicing of this proposed debt."

F. Technical Soundness

1. Availability of Statistics on Health Status

In any effort to focus on the important Korean health problems, one immediately confronts a great lack of quality statistical information upon which to draw for making firm decisions on proposals for the future use of resources in health. The EPB studies of the economy seem to be excellent but studies on health problems have not been conducted in much depth. The following consists of available statistical information that has relevance to the health problems in Korea.

The completeness of death registration, 1960-65, is estimated to be 55%. The under-enumeration of births and deaths has been highlighted in a 1968 study of "The Population of Korea", by Kwon and Kim.* Recent studies of death rates leading to

*Kwon, E. Hyock and Tae, Ryong Kim: The Population of Korea, Journal of Population Studies, No. 7, 1968, pp. 144-146.

age-specific death rates have resulted in the beginning of the use of life tables as an important approach to the understanding of population dynamics.

The national literacy of 91.3% is very high. However, According to the following list, the literacy and educational attainments of the rural population, who most need better medical and preventive services, have lagged behind urban populations.

Educational Attainment in Korea, 1973*

Population Group	Percentage of Illiteracy	College Education
Cities	4.9%	22.3%
Medium Cities	5.2%	7.8%
Town	6.9%	4.2%
Villages	17.8%	1.9%

Illiteracy, like nutrition, has a direct and two-way relationship to the health status of an individual or group of individuals. Viewed from an individual's health status, illiteracy is a major obstacle to transmitting traditional or non-traditional knowledge of methods for improving or maintaining personal hygiene. Conversely, ill-health merely increases the effectiveness of the obstacle to communication.

EPB indicates in its 1974 chart booklet** that in 1973 the not economically active*** part of the population, 14 years and over, was 43% of the potential labor force, or

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*Huh, Jong, M.D. and Yong, Soo Park, D.V.M.: A Study on Medical Care Expenditure, School of Public Health, SNU. Based on a sample survey conducted in August 1973.

**Major Statistics in Charts: Economic Planning Board, Korea 1974, p. 26.

***Those who are not employed.

8,838,000 persons, mostly women. Obviously one of Korea's greatest mature resources is women, when and if they can be more equitably integrated into the work force.

Furthermore, with the annual rate of population increase falling from 2.9% in 1960 to approximately 1.7% in 1973, a large number of families are being freed from the crushing effects of high dependency levels. This is an indication that important elements will be added to the literate, mature, economically active group. Thus, if one discounts the potential labor force by the factors of limited employment opportunity for women, illiteracy, and a high dependency level, it is clear that the tremendous development that has been achieved has come from a smaller group than is indicated by EPB's chart book.

Due to the extremely high density of population, rapid transformation from an agrarian to an industrialized society and many other factors, rural life conditions differ from those in the U.S. and many other countries. Farmers live in clusters of homes and the daily routines of the Korean attending his animals and his small plot of land are very different from large areas of the world, but similar to the century-old patterns of many eastern countries. "Rural" in Korea signifies clusters of villages and towns with populations up to 50,000 people.

Urban conditions are represented by the two large cities (Seoul and Pusan) and approximately 33 medium-sized cities. From an epidemiologic viewpoint (i.e., how disease gets around) even rural areas, so classified, have population densities that enhance the ease and speed with which disease gets spread through a group of people, townships or other concentrations of people.

There exists an enormous amount of information on various aspects of the whole health picture in Korea. Health status can be judged by the registration of vital events (births and deaths), as well as prevalence and incidence data on specific diseases. In addition, the knowledge of certain living conditions and customs relative to pregnancy, family size, birth, abortion and others as they relate to vital events are important. Long-lasting disease and/or crippling conditions, special environmental factors (water and human waste disposal) all come into the picture to bring balance and understanding relative to the purposes and goals of the proposed project.

A discussion between the Project Development Team and staff of the Bureau of Statistics (BOS) of EPB indicated that registration of births and deaths are still not 50% complete within the legal time requirements. As time passes, however, from the date of each vital event, the percentage of total registration of live-births naturally increases because of the need for health care, schooling, etc.* On the other hand, the percentage of registration for abortions, still births and infant deaths probably does not increase very much as time advances.

a. Vital Events (Registration)

Crude death rate -- 7.6/1,000 (1971), 7.4/1,000 (1974)
Crude birth rate -- 29.4 (1971), 25.0 (1974)
-- still births - est. 33/1,000 live births
-- spontaneous abortions - est. 158/1,000 live births
Infant mortality rate -- 45/1,000 live births (1970)

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*Sung-Kwan Lee, M.D. et al; The Status of Maternal and Child Health in a Rural Area, Dept. Preventive Medicine and Public Health, Kyungpook National University, Taegu, Korea, October 1972.

	1955	1970
Expectation of life at birth	50	65
-- for males	49	63
-- for females	51	67

Population growth rate -- 2.96 (1960), 1.7 (1973)
Tuberculosis deaths -- est. mortality 20,000 deaths/yr.
-- 6,830 deaths, 1973

b. Prevalence and Incidence Data

Tuberculosis prevalence est. -- 6.74% of population 5 years and older
Typhoid fever -- 1970 - 41,112 cases; 1973 - 9 deaths and 789 cases
Intestinal parasites -- Est. prevalence of 60% of rural population with one or more types
Tetanus* - 1969-73 (reported by hospitals)

5 year period	791 deaths
Neonatal	686 deaths
Post-natal mother	14 deaths
Pre-school	91 deaths

Acute communicable diseases of childhood - measles, chickenpox, mumps, etc., are all prevalent
Influenza and other virus diseases, including Japanese encephalitis, occur in sporadic epidemics
Leprosy prevalence -- 2-3/1,000 population, total est. 80,000
-- 38,610 registered cases in 1974
Korean hemorrhagic fever -- 1972 - 186 cases, 16 deaths
-- 1973 - 237 cases, 17 deaths Army
-- 1973 - 178 cases, 19 deaths, civilian

The lack of high environmental sanitary standards continues to constitute an important threat to the health

*Note: Tetanus is not a reportable disease.
Gobius, R. J., M.D., WHO, Korea. Christian Hospital Association Meeting, March 17-18, 1975, JeonJu.

of the people. In 1974, the MHSA reports that 52.1% of the total population had access to safe drinking water. The level is only 25% for rural areas. The health hazards of relying on unprotected sources for drinking water is compounded by the fact that not only are sanitary privies rare in rural areas, but uncomposted human wastes continue to be used by farmers as fertilizer.

2. Health Delivery Capacity and Expenditure Patterns

A June 1974 AID report pointed out two basic characteristics of the existing health delivery system in Korea:

a. The existing medical care delivery capacity in Korea is primarily in the private sector. Provincial, gun and myon level governmental facilities almost exclusively impact on the low-income segment of the population and these services are operated on a welfare basis. At the myon level, the services are limited and categorical in nature.

b. The payment for services, both ambulatory and inpatient, is on a fee-for-service basis. Charges are determined by the unit of service provided. This is true for both private and public facilities.

Tables III-11, 12, 13, and 14 illustrate the health facility capacity for Korea. Table III-15 is the 1973 expenditure rate, as computed from urban and rural household surveys, for medical services in the private sector. The public rate was taken from the national budget accounts for fiscal year 1975. While these two figures leave much to be desired in terms of a definitive statement on expenditures, they are the best available at this time and are being presented herein as indicators. The Korea Community Medicine Corporation estimated the total expenditure rate at $13.50 per capita but a breakdown of their tables was not available for this paper.*

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*A Proposal for a Community Health Care Program, Korea Community Medicine Corporation, November 1974.

Table III-12

Health Facilities

In 1974 the Korean Statistical Year Book lists the following breakdown of facilities for 1973.

Type / Province	Hospitals	Clinics*	Dental Clinics	Dispensaries	Health Centers
Total	205	5,993	1,546	162	193
Seoul	60	2,283	832	60	9
Pusan	23	638	146	15	6
Kyonggi Do	25	578	102	20	27
Kwangwon Do	16	197	32	10	19
Chungchong Pukdo	7	144	23	12	12
Chungchong Namdo	7	400	87	8	17
Cholla Pukdo	14	255	40	5	16
Cholla Namdo	14	433	58	6	26
Kyongsang Pukdo	23	646	149	15	33
Kyongsang Namdo	13	371	66	11	25
Cheju Do	3	48	11	-	3

*Private hospitals with fewer than 50 beds are classified as clinics.

Table III-12

Distribution of Hospitals in the Various Provinces/Cities

1. Seoul	56 hospitals	8546 beds	utilization rate 68.4%
2. Pusan	19 "	1745 "	" " 45.5%
3. Kyonggi Do	29 "	1986 "	" " 62.5%
4. Kwangwon Do	11 "	495 "	" " 21.5%
5. Chungong Pukdo	5 "	183 "	" " 18.2%
6. Chungchong Namdo	10 "	750 "	" " 20.5%
7. Cholla Pukdo	8 "	688 "	" " 43.6%
8. Cholla Namdo	11 "	1240 "	" " 31.1%
9. Kyungsang Pukdo	16 "	1616 "	" " 62.1%
10. Kyungsang Namdo	13 "	946 "	" " 88.1%
11. Je Ju Do	3 "	131 "	" " 54.0%
Total	181 "	18306 "	" " 57.7%

Source: Yearbook of Public Health and Social Statistics, 1973.

In 1973 the Korean Hospital Association listed the bed capacity of these facilities as follows:

Table III-13

No. of Beds in Medical Facilities by Province, 1973*

Classification / By Province	Population	Beds in Hospital	Beds in Clinics	Total Bed	No. of Bed per One Hundred Thousand Pers
TOTAL	31, 435, 252	22, 089	18, 305	40, 394	128. 5
Seoul City	5, 525, 262	8, 756	2, 580	11, 336	205. 2
Pusan City	1, 876, 391	3, 160	2, 041	5, 201	277. 2
Kyonggi Do	3, 353, 272	1, 540	2, 429	3, 969	118. 4
Kwangwon Do	1, 865, 426	762	843	1, 605	86. 0
Chungchong Pukdo	1, 480, 338	245	603	848	57. 3
Chungchong Namdo	2, 858, 202	721	1, 474	2, 195	76. 8
Cholla Pukdo	2, 431, 892	936	1, 335	2, 271	93. 4
Cholla Namdo	4, 004, 832	2, 632	2, 632	5, 515	137. 7
Kyongsang Pukdo	4, 555, 866	2, 153	2, 553	4, 706	103. 3
Kyongsang Namdo	3, 118, 634	802	1, 559	2, 361	75. 7
Cheju Do	365, 137	131	256	387	106. 0

*From Korean Hospital Association Meeting, October 1974.

Table III-14

Health Institutions in Rural Area*

Area	Provincial Hospital		Health Center	Health Sub-center
	Number	Beds		
Total	14	560	140	1,342
Kyonggi	4	211	19	177
Kangwon	2	80	15	90
Chungbuk	-	-	10	96
Chungnam	3	115	15	165
Chonbuk	1	64	13	149
Chonnam	1	24	22	212
Kyongbuk	2	32	24	230
Kyongnam	-	-	20	212
Cheju	1	34	2	11

*Prospectus for Rural Sanitary and Clinical Facilities, Korea, Dec. 1972, Section III.

TABLE III-15
1973 ANNUAL EXPENDITURE RATES

Average income per farm household*	$1,216
Average total expenditure per household	959
Average household expenditure for medical care	24.13
Per capital health expenditure (5.98 residents per household)	4.04
Health expenditure represents 2% of total income	
Average income in all cities per household**	1,146.25
Average total expenditure per household	1,027.25
Average household expenditure for medical care (except Seoul)	27.25
Per capita expenditure (5.26 per household)	5.18
Health expenditure represents 2.4% of total income	
In Seoul	
Average household expenditure for medical care**	34.86
Per capita expenditure (5.05 per household)	6.91
Of total per capita health expenditure:	
Farm population represents	3.43
City population, including Seoul, represents	5.14
National Government represents ($25.4 million)	.77
Provincial & local government represents ($38.8 million)	1.18
National expenditure in health, public/private, per capita	10.52
Total national expenditures (estimate)	352.4 (million)
Private sector expenditure per capita	10.09 (84%)
Public sector expenditure per capita	1.95 (16%)
As a percent of GNP at $335 per capita, private sector in health expenditure represents	2.6%
Public sector represents	.6%

Sources: Korea Statistical Yearbook, 1974, EPB; Summary of Budget for Fiscal Year 1975, EPB

*Did not include small landowners under 1.25 acres.

**Did not include household income above $4,167 per year. It is estimated that households above this figure account for a major expenditure in hospital costs and specialist utilization patterns.

However, an independent study of medical care expenditures in farm and urban households tends to confirm the figures in Table III-15.*

Korea has excellent capacity for training medical personnel; its fourteen medical schools graduate approximately 1,400 M.D.'s per year. However, for a variety of reasons already mentioned herein, few of these physicians are available for rural areas and low-income populations. While the hospitals, health clinics, and other facilities are not adequate to meet the needs of the country, they are more importantly underutilized in their present settings. One would have to conclude, then, that the factors listed below should be given high priority within the demonstration area(s) to improve health care and preventive services:

a. Environmental sanitation services;
b. Maternal, child health and family planning services;
c. Early detection of diseases, improved diagnostic facilities, epidemiologic and health education;
d. Increased utilization rates of both public and private hospitals; and
e. Improved contact between low-income groups and existing public health facilities.

It should be noted that priority attention given to most of these factors will not involve hospital beds nor costly and large numbers of specialized personnel. Currently there is controversy concerning the approach to the control of neonatal tetanus. In cities where women have access to medical facilities the use of two injections of vaccine may be the most effective control measure even though it is expensive.

Simple effective approaches to this problem are practiced normally in many parts of the world, resulting in near eradication of tetanus of the newborn. In addition, whole complexes of simple things such as a drop of

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*Huh, Jong, M.D. and Young Soo Park, D.V.M.: A Study on Medical Care Expenditure, School of Public Health, SNU, August 1973.

penicillin solution in each eye at birth, oral polio vaccine, pre- and post-natal instructions regarding care and feeding can all be accomplished without the use of a single costly hospital bed. These measures to prevent tetanus, blindness, crippling and other prevalent health problems surrounding the vital event of birth will bring health and improved productivity to millions at small relative cost. If the loan resulted in a recognizable improvement for the low-income disadvantaged Korean through research, readjusting the mix of personnel functions, teaching new and more efficient methods of care and putting into operation a feasible and affordable systematic approach to the problem, it would result in a major contribution to the Korean health status.

3. Utilization of Physician Extenders

As stated on page 46 of this paper, it is unlikely that Korea can effectively address the health needs of the rural population without the training, deployment, and utilization of a class of primary care personnel below the level of physician. Such personnel are referred to in this paper as "physician extenders". An important aspect of most of the demonstration projects to be financed by the loan will be the use of such physician extenders. Accordingly, the acceptability of the physician extender concept is a key factor for the determination of the Project's technical soundness.

ROKG policy has tended to depend on physicians for delivery of health services to the Korean population. However, the Project Development Team found several positive signs that the ROKG recognized the need to modify this policy and is ready to accept the physician extender concept:

a - The Director of the Bureau of Medical Affairs (MHSA) assured the team that it is common practice under ROKG-sponsored health programs for paramedical workers to provide curative medical services under the general supervision of physicians. Therefore, there should be no difficulty in utilization of physician extenders in loan-financed demonstration projects.

b - ROKG officials agreed to incorporate a specific program for the preparation of physician extenders in the Project (See pages 75-77).

c - It is likely that the ROKG will officially request an IBRD loan for the training of allied health professions which will include physician extenders.

The broader replication of successful project results using physician extenders will probably require a modification of the

Medical Affairs Law to give formal recognition to a physician extender profession, designate new categories of such workers, define the range and limits of their responsibilities, and prescribe desirable supervision and control over their activities. On the basis of experiences in other countries that have experimented with health care systems, such legal and procedural changes can reasonably be expected to follow the demonstration of successful results.

4. Emigration of Physicians

The fault for this situation does not lie entirely with the current policy allowing physician emigration, but rather with the misunderstanding of its implications on supply and demand functions in a consumer economy. There is no objective evidence to demonstrate that increasing supply by dampening export will lead to more physicians available for the general population, especially rural based. Those who tend to emigrate are probably the most competitive, brightest and professionally aggressive in their classes. They would not practice in rural areas, and if they remained in the medical field at home, they would charge rates commensurate with their thwarted expectations of earnings abroad. Through anecdotal material, it is understood that some well-trained physicians enjoy annual incomes of $24,000 in Seoul and Pusan. Since the per capita income is approximately $335 per year, these physicians are probably in the top 1% of wage earners and serve a limited segment of the population, those who can afford the high cost of medical care.

Moreover, all of these physicians have been trained under Western curricula by Western-educated faculty. They have not been trained for the needs of Korea. The extent to which the current ROKG emigration policy complicates the effort to address Korea health needs will diminish as the Government revises its policies for the health sector and places increasing reliance on properly supervised physician extenders for primary

G. Justification for Local Cost Financing

It is anticipated that about 82% of loan funds will be used to finance local costs of implementing the Project, with most of these expenditures necessary for health delivery demonstration projects. The proposal to cover high levels of local costs varies from past AID practice which primarily financed the dollar cost of project activities. However, the Project Development Team believes that this approach is fully justified. The project is highly experimental, and the ROKG has had little prior experience in mounting such field health demonstration activities. In order to attract broad-based budgetary support for subsequent replication and further experimentation, the health care delivery systems to be financed by the project must first demonstrate their effectiveness. Moreover, the Congressional Mandate for AID to focus on the problems of the poor majority, to which this project is directly responsive, will logically lead to increased requirements for local-cost financing; the foreign exchange component of projects concerned with lower income groups will be proportionately much less than for projects assisting industrial, infrastructural, and macro-economic development.

In the Project Development Team's judgment, the ROKG commitment to finance 25% of total project costs is appropriate, particularly in light of current budgetary constraints and balance of payments difficulties being experienced by Korea. In summary, the Project Development Team believes that the results of this project will make an invaluable contribution to the process of determining future Korean policy in the health delivery field and they hopefully will also prove extremely beneficial to other governments in the region. The magnitude of these potential payoffs is sufficiently great to justify AID financing of a large portion of the local currency costs of the project.

SECTION IV IMPLEMENTATION ARRANGEMENTS

A. AID's Administrative Arrangements for the Project

A full-time AID direct-hire health professional who can both monitor the project and provide technical support will be very important to its success, particularly during the first 2-3 years of operation when untried inter-ministerial and public-private sector links are being forged. A much less desirable arrangement would be the allocation of at least one-third of the time of a suitable USAID/Korea health or developmental specialist, supplemented by both TDY support and the presence of a full-time U.S. contract advisor, funded by a grant or by the loan. USAID monitoring services will be crucial during the first year of the Project when work requirements can be expected to require as much as two-thirds of the USAID representative's time. During this period, the National Health Council, the National Health Secretariat and the Korean Health Development Corporation will be formed and key policy decisions made.

USAID must be prepared to provide this strong support in order to insure a reasonable chance of attaining the Project goals. In order to be prepared for the possibility that a full-time AID representative will not be present throughout the life of the KHDC, loan funds must be earmarked to permit the securing of five man-years of technical support as needed. The Project Budget Tables in Section III, Part F, include contingency planning for this purpose.

B. Organizational Components

1. The Korean Health Development Corporation

The overall organizational arrangements and functions of the National Health Council, National Health Secretariat and Korean Health Development Corporation have been discussed in Section I. The major responsibility for the design, oversight, and monitoring of field demonstrations, which constitute the heart of the Loan Project, is

entrusted to the KHDC. A more detailed description of this organization therefore follows.

The KHDC will be established by Presidential Proclamation and through the passage of appropriate laws by the Korean National Assembly. The KHDC is to be established as a semi-autonomous institution of the ROKG. In order to carry out its functions, the KHDC is to be provided with a budget, as described in Table III-12, including the funding of up to 93 man-years of professional time and 46 man-years of non-professional time throughout the life of the Loan Project. The staff ceilings are twenty-one (21) professional and eleven (11) non-professional workers for a total staff of 32 people. Additional staff inputs through the transfer of staff positions and funds from the National Health Secretariat have been described in Section I.

Table IV-1 presents a breakdown of the distribution of manpower for the KHDC. Table IV-2 presents anticipated manpower requirements during each year of the Loan Project. It is the intent of the Project to keep staff to a minimum in order to maximize the funds available for the delivery of health services to the demonstration site(s).

2. KHDC Divisional Responsibilities

The major functions of the KHDC are described in Section I. To carry out these functions, it is expected that the KHDC will be organized in the manner described in the following paragraphs. The Corporation shall be organized into an Office of the President and four (4) divisions, as shown on Table IV-1.

a. Office of the President

The President of KHDC has primary responsibility for:

(1) Insuring the implementation of the goals and functions of the Corporation through the initiation of program plans and activities.

(2) The effective utilization of monetary and human resources at the disposal of the Corporation and its programs.

TABLE IV-1

THE DISTRIBUTION OF PROFESSIONAL STAFF IN THE KHDC
(Assumes full complement of 32 by FY 1978)

	No. of Employees
A. Office of the President	1
B. Administration Division	3
1. Chief (1)	
2. Management Officer (1)	
3. Bookkeeper (1)	
C. Health Projects Division	6
1. Chief (also serves as Vice President (1)	
2. Nurse or Nurse/Midwife (1)	
3. Sanitarian (1)	
4. Epidemiologist (1)	
5. Health Educator (1)	
6. Health Planner (1)	
D. Manpower Development Division	4
1. Chief (1)	
2. Training Specialist (1)	
3. Training Materials Specialist (1)	
4. Editor (1)	
E. Research Planning and Evaluation Division.....	5
1. Chief (1)	
2. Evaluation Design Specialist (1)	
3. Data Analyst (1)	
4. Health Planner (1)	
5. Health Economist or Social Anthropologist (1)	
Sub-Total:	19
Uncommitted Positions:	2
Total Professional Positions:	21
Non-Professional Positions:	11
Total Staff of KHDC:	32

TABLE IV-2

KHDC MAN-YEAR REQUIREMENTS THROUGH 1980*

	FY 1976	1977	1978	1979	1980	Total
A. Professional Positions:						
President	1	1	1	1	1	5
Planning & Eval.	2	3	4	4	4	17
Manpower Development	3	4	4	4	4	19
Health Projects	3	7	7	7	7	31
Administration	3	3	3	3	3	15
Uncommitted positions (contingency)	-	-	2	2	2	6
Total Professional	12	18	21	21	21	93
B. Non-Professional Pool	6	7	11	11	11	46
Total Staff	18	25	32	32	32	139

*NOTE: In addition to the KHDC staff, a total of 15 professional man-years and 7 non-professional man-years are to be provided to the National Health Secretariat. A portion of these positions and funds for their costs can be expected to be transferred to the KHDC over time. The regular KHDC ceilings for professional and non-professional personnel are 21 and 11 positions respectively.

(3) The supervision of management practices, accounting and auditing procedures.

(4) Preparing periodic planning documents and activity reports for submission to the Corporation's Board of Directors and the National Health Council for review and approval.

(5) Preparing and distributing program assessments, evaluations, research findings, and recommendations related to the functions of the Corporation.

(6) The preparation of quarterly fiscal reports and budget requests; annual plans; annual progress reports; and, a final Loan Project report to be submitted no later than July 1980 to the Council. Annual plans, including fiscal plans, must be received by the Council no later than 40 days prior to the beginning of the fiscal year.

b. Planning and Evaluation Division*

This Division shall be responsible for:

(1) Carrying out the planning, data collection and processing, analysis and technical assistance as described in the KHDC's approved annual plans.

(2) Insuring the development and implementation of program evaluation plans, activities, instruments, designs, analysis, and reporting systems necessary for both the program evaluation of existing health

*The program evaluation conducted by the Corporation is distinct from the evaluative research functions of the National Health Secretariat on the KHDC's overall activities. The former refers to the general process of assessment or appraisal of value. Evaluative research, on the other hand, is restricted to the utilization of scientific research methods and techniques for the purpose of making an evaluation. In this sense, evaluative research refers to those procedures for collecting and analyzing data from the Corporation's activities which will increase the possibility for "proving" rather than "asserting" the worth of the Health Loan Project.

delivery systems in Korea as well as any new projects supported by the KHDC. The scope of evaluation can be expected to include the measurement of the health and nutritional status of populations before, during and after the introduction of program activities; studies of record-keeping and data utilization systems; changes in patterns of accessibility and utilization of health services and resources; family health practices; the efficient utilization of health manpower, including task analyses; the minimum health resources required to meet the needs of low-income families; and administrative analyses of the activities of, or those supported by, the KHDC.

(3) Insuring the provision of technical assistance in data systems design and evaluation for those interested in the evaluation of health delivery systems for low-income populations in Korea. Such technical assistance shall include the holding of periodic health evaluation workshops, and the publication and dissemination of practical guidelines, manuals, forms and other related materials.

c. Manpower Development Division

The Manpower Development Division shall be responsible for:

(1) The development and implementation of plans for efficient and effective utilization of health manpower in Korea for the delivery of promotive, preventive and curative health services to low-income families. In pursuit of these goals, the Division shall participate in the analysis of current manpower utilization approaches employed in Korea and elsewhere, and insure that adequate provisions are made for the evaluation of manpower utilization in existing or Loan Project-supported health delivery systems, including training activities.

(2) The development of health manpower components in projects supported by KHDC, including insuring the availability of task analyses, the construction of pre-service and in-service training activities, curricula design, the dissemination of sample materials and guidelines, and the maintenance of a specialty library.

(3) The publication of a monthly KHDC newsletter directed toward community-level workers (including midwives, sanitarians, nurses and multi-purpose workers) who provide health services to low-income families. The newsletter will (a) serve as a means of disseminating information about health delivery approaches being used in various parts of the nation and elsewhere; (b) highlight successful efforts of selected workers; (c) inform workers of new technical and administrative developments; and (d) focus on unmet needs and problems yet to be resolved.

(4) The holding of periodic workshops for selected health workers in the design of training efforts, educational philosophies and techniques, training materials and equipment, evaluation techniques, etc.

(5) The coordination of internal and international training support activities, including responsibility for the collection and suitable dissemination of field trip reports which will be required of all trainees assigned to other parts of Korea for observational purposes, or sent abroad for training. Degree-level training supported from Loan Project funds will be limited to three (3) one-year training programs.

(6) The development and implementation of a Physician Extender program, including the design of a program based on the findings of manpower

utilization studies; the training of no fewer than three (3) training specialists for up to three (3) months; development of Physician Extender curricula suitable for Korean conditions; training of at least twelve (12) Physician Extenders; and conducting a detailed objective evaluation of this program with the assistance of the Secretariat.

d. Administration Division

The Administration Division shall be responsible for:

(1) The fiscal, logistical, and managerial support required for the fulfillment of the goals and functions of the KHDC.

(2) Establishing accounting, auditing and inventory procedures as required by the laws and regulations of the ROKG and USAID.

(3) Administrative support, which shall include but not be limited to the establishment of filing systems; the reproduction and storage of documents; the securing of clerical workers and laborers; the maintenance of properties of the KHDC; the preparation and dispatching of documents and the preserving of official seals; the establishment of systematic maintenance programs for vehicles and other KHDC equipment or supplies; the procurement of official documents; travel support for each of the Divisions of the KHDC; the arrangement of documents related to banking, loans, fiscal and other required reports; and other such duties as required by the KHDC.

e. Health Projects Division

The Health Projects Division shall have responsibility for:

(1) The initial identification and assessment of existing health service delivery efforts in relation to the health needs of low-income people.

(2) The design and development of low-cost integrated health delivery system suitable for (a) meeting the basic health needs of low-income Koreans in the demonstration area(s), and (b) being replicatable elsewhere in Korea. Its staff will be expected to remain in constant contact with the demonstration project staff and serve as a major source of technical support for the project workers. In this capacity, the Division staff will serve as a bridge between the organizations involved in the Health Loan Project and the field. Although certain demonstration projects may be supported through contractual arrangements, the Division will at all times maintain primary responsibility for oversight and monitoring of such projects. It should be anticipated that members of this Division will be posted in the field at project demonstration sites for periods of more than a year in order for them to provide technical and monitoring support.

(3) The development of long and short-range project support plans in response to the mandate of the KHDC, including the development of recommendations for selected support for certain existing health delivery projects in Korea, particularly in the fields of manpower development and evaluation. The Division will be expected to be a major information resource regarding the state of promotive, preventive and curative health delivery systems which have been or are being tested in Korea. The Division shall also provide assistance to the Manpower Development Division in the preparation of materials for the KHDC's monthly newsletter.

(4) The provision of leadership and technical support for the collection, design, pre-testing and dissemination of basic health education materials for use in village homes and by small groups under rural conditions. Such materials shall include simple brochures, flipcharts, posters, inexpensive models of sanitary privies, and related materials.

f. Technical Advisory Committee to the KHDC

A Technical Advisory Committee to the Corporation will provide guidance on program policy and development. It will consist of public and private organizations having an interest in the conduct and results of health research and demonstration projects, such as the Ministries of Agriculture, Commerce, and Defense, the Korean Family Planning Institute, the Korean Tuberculosis Association, the Korean Medical Association, the Korean Public Health Association, the Korean Institute for Research in the Behavioral Sciences, the Korean Association for Parasite Eradication, the Korean Community Medicine Corporation, academic institutions (such as units of SNU, Yonsei University, Ewha University, and Pusan University), representatives of private groups (e.g., Blue Cross, Korean Oil Company, drug manufacturers), WHO, CARE, UNFPA, the Peace Corps and other external groups. It will also serve as a vehicle for providing or recommending short-term consultants where needed. It can be anticipated that this committee will contain many of the most experienced people in Korea in the field of delivering primary preventive and curative health services to low-income families.

g. Board of Directors, KHDC

The Board of Directors will elect a Chairman from among its membership, and nominate by simple majority vote to the Council a President for the Corporation.

The President shall serve thereafter as a non-voting member of the National Health Council.

The Board of Directors will review and make recommendations to the President on the Corporation's annual fiscal and program plan. The following shall compose the Corporation's Board of Directors (ministerial representation will be from the Bureau Chief level).

(1) Ministry of Health and Social Affairs
(2) Ministry of Home Affairs
(3) Ministry of Education
(4) National Agricultural Cooperative Federation
(5) Korea Development Institute
(6) President, Korea Health Development Corporation
(7) Korea Community Medicine Corporation, and six (6) to eight (8) other members selected from the private sector, i.e., representatives from the university community; Korea Industrial Health Association; Korea Blue Cross; Korea Hospital Association; Korea Nursing Association; Korea Public Health Association; Korea Pharmaceutical Association; and Korea Institute for Research in Behavioral Sciences.

h. Staff Appointment Procedures for the Korea Health Development Corporation

The President of KHDC shall nominate to the Board of Directors staff appointments for the position of director in each division. All other staff shall be appointed directly by the President who shall take care to insure that division directors and all other staff appointments reflect due credit on a broad spectrum of health competencies available in both the private and public sector.

3. Health Loan Demonstration Project(s)

One of the main purposes of the Project is to design and test new ways of providing low-cost health services to

people who are not currently receiving adequate services. Consequently, the project will require significant innovations in the approach to providing health services, including: (a) major shift in emphasis from providing only curative services to providing promotive and preventive health services and health education; (b) restructuring the roles played by providers of service (e.g., greater utilization of especially trained allied health personnel to provide selected services formerly available only from physicians); and (c) closer integration and cooperation between public and private providers of services.

It has been agreed that the creation of a new, semi-autonomous health development corporation is essential to the successful implementation of an experimental program of this type.

This new organization will be responsible for designing, approving, and conducting program evaluation of the field demonstrations to be funded under the loan. To conserve resources and avoid duplication of effort, the new organization may contract with other public or private organizations to implement the health demonstrations.

In order to reach the agreed on target population of about 500,000 over the life span of the project, it will probably be necessary to establish at least three gun-level projects plus utilization of one gun as a control area for comparing project results. It may be desirable to use a different strategy or model in each gun to see which can provide the highest level of service at the lowest cost. These models could include:

a. A joint effort by the Ministry of Health and Social Affairs and the Ministry of Home Affairs to establish an effective government health network extending from the village up through the myon and gun health centers to a provincial referral hospital;

b. A community-based health commission operating at the provincial or gun level to raise health levels through both private and public service outlets; and

c. A cooperative-based system which would provide health care and education through agricultural or credit cooperatives.

In fulfillment of its primary responsibility, the KHDC will be responsible for the development, initiation and oversight of large-scale stration projects. Demonstration projects should be so organized as to integrate all ROKG health workers under a single health administration within the project area, including those attached to public health centers, sub-centers and hospitals. Arrangements will be completed prior to the final selection of the demonstration site for referral services to hospital facilities in the district or province.

The selection of the demonstration site will conform to criteria approved by the KHDC Board of Directors and the National Health Council. The primary guideline should be based on a low-cost health delivery system for low-income families, and this should have the potential for replicability throughout the Republic of Korea. The system to be tested will take into consideration the major elements essential for the protection of the health of the people, including manpower training and utilization; essential facility requirements; health care financing; supervision; equipment and logistic support; transportation; community involvement and support throughout the life of the Project; data collection, analysis and feedback; the balance of promotive, preventive and curative services; emphasis on the major health needs of the people, including maternal and child health, family planning, environmental sanitation, immunization, other forms of communicable disease control, nutrition, etc.

It is expected that the selection criteria would also include the following considerations:

a. It is the intent of the Loan Project that a demonstration low-cost health delivery system not be imposed upon a population but that the planning, implementation and program evaluation be designed and carried out in such a way as to provide maximum opportunity for meaningful inputs, including involvement in decision-making, by those for whom the services are intended. An intensive review of plans for community involvement of each proposal for initiating Loan-supported demonstration activities shall be required as an integral part of the review process.

b. All proposals for the conduct of demonstration projects shall include detailed program evaluation plans. For the major demonstration project(s), program evaluation design must include carefully selected control areas to permit a valid determination of changes induced by the project effort.

c. Major demonstration project sites shall be located sufficiently far from major cities to insure that outcomes are comparable to those which could be expected in rural Korea. Daily commuting from major cities to the project site(s) by field staff should not be permitted.

d. Operational and funding proposals for demonstration site activities must include plans for the training of all field workers in basic maternal and child health, and family planning concepts and techniques, in the nutritional needs of the population, and in community organization and education techniques basic to the meaningful participation and successful conduct of community health services.

It is anticipated that modest capital expenditures may be required to make available a few hospital beds essential for providing proper medical care in the demonstration gun. Such expenditures, if required, are to be provided as a part of the Project only under the following three conditions:

a. An objective and scientifically valid study of health care facilities in the demonstration area, their use patterns and the behavioral, attitudinal, economic and other explanatory factors shall have been completed. The results of this study must clearly indicate the need for providing a few hospital beds to render the basic level of services required. The above study shall be undertaken by an organization which is both highly respected and has proved its ability to undertake such research (e.g., the Korean Institute for Research in the Behavioral Sciences).

b. The facility in question shall be planned, constructed and operated with significant participation and financial or other support from the population to be served. That population shall be provided with all possible opportunities to influence decisions about the facilities in which they will be served, what services will be provided, by whom, and under what conditions.

c. The design for the size and type of facility to be constructed to meet the in-patient and out-patient medical and public health needs of the community shall be based on:

   (1) A study of the incidence and prevalence of diseases currently existing in the demonstration site area;

   (2) An analysis of the extent to which such diseases can be prevented, or the consequences of such diseases, minimized through early case-finding and suitable treatment; and

   (3) The extent to which such cases might be treated either at the community level through a Physician Extender program, or at other existing facilities accessible to the population.

4. Specific Service Outputs Expected

In the demonstration areas, a basic objective will be to evolve the best systems for providing high-quality primary health service through the most cost-effective network of facilities and manpower.

It is assumed that introduction of the new delivery systems and health providers discussed above will result in a significant expansion of primary health services at the myon, village, and household levels. However, to avoid overloading the system with too many responsibilities, it will be essential to establish priorities as to the types of primary services to be provided and the population to be served. While it may be very difficult in practice to concentrate only on certain problems, it is felt that priority should initially be given to the needs of pre-school age children and women of child-bearing age. Especially among low-income groups, these categories are the most susceptible to disease and illness. Some of the major factors affecting low-income groups in Korea are listed in Table IV-3. The demonstration projects could concentrate on some of these problems by providing the following kinds of alleviating services:

Problem	Alleviating Services
(1) High rate of common communicable diseases preventable by immunization.	(1) A minimum coverage of 80% of target group via immunization for diseases prevalent in demonstration areas.
(2) High rate of infection and neonatal tetanus accompanying childbirth.	(2) Combination of (a) providing instruction and sanitary "delivery kit" to mother and

Problem	Alleviating Services
	attendant, (b) increasing access to professional pre-natal and midwivery service and (c) immunization (where appropriate).
(3) High incidence of water/air-borne diseases.	(3) Combination of (a) promulgation and enforcement of improved environmental sanitation laws, (b) increase availability of potable water (e.g., via Sae Maeul or New Village Movement activities), and (c) increased educational effort on personal hygiene.
(4) Malnourishment among preschoolers.	(4) A combination of (a) instruction on increased home production/consumption of more nutritious foods (e.g., soybeans), (b) breastfeeding instruction, and (c) urging childspacing (where appropriate).
(5) Undesired pregnancies and births.	(5) Increase quantity and quality of family planning services at village level.

Problem	Alleviating Services
(6) Cost of professional health care too prohibitive for low-income families.	(6) Combination of (a) training and utilizing paramedics to reach more families, (b) diagnosis and treatment at lower levels of health care system, (c) spreading of risks and costs via health insurance, (d) giving attention to preventive measures (by the individual and by health care providers), and (e) establish referral system to make better utilization of public hospital system.
(7) Emergency treatment not available at village level.	(7) Develop first-aid and emergency referral centers in cooperation with Mothers' Clubs, New Village Movement or other local groups. Upgrade training and practice standards of local druggists.

These basic services would constitute the key elements in the PCN (Primary Care Network) established in each demonstration area, although the delivery channels could be varied to test public-, private- or cooperative-based alternatives. Once the actual sites are chosen, the target population, the health resources, etc., can be assessed and specific performance standards and annual

TABLE IV-3

SOME OUTCOMES OF EXISTING FACTORS IN THE KOREAN HEALTH DELIVERY SYSTEM

Existing Factors	Outcomes
1. Relatively small expenditures for the prevention of disease; high expenditures for drugs, treatment. 2. Low levels of immunizations. 3. Very limited environmental sanitation. 4. Almost no health education.	High rates for preventable diseases. Early death of infants, children. Lowered life expectency.
5. Very limited pre-natal care. (MCH) 6. 95% of babies delivered by untrained persons. 7. Limited well-baby services, nutrition education	High infant and maternal mortality.
8. Late detection, diagnosis and treatment of disease. 9. Almost no health insurance available. 10. Limited free services; low quality service; underutilization of hospital facilities.	Unnecessarily high numbers of severe cases, longer treatment time, more hospitalization; high facility costs. High costs in life, disability, money.
11. Dependence on physician for treatment.	Very expensive manpower costs, Lack of care in rural areas, Economic barriers to receiving care.
12. Independent hospital and public health systems.	Lack of effective coordination, no client referral system Loss of service resources to local areas.
13. Limited private or community involvement health planning, delivery programs.	Programs unresponsive to local needs. Drug sellers who diagnose and prescribe receive no supervision; no coordination between MD's and druggists.
14. Limited use of multi-purpose health workers.	Duplication of effort in providing coverage.

output targets established.*

5. Program for the Preparation of Physician Extenders

An important element in the demonstration projects will be the deployment and utilization of Physician Extenders. From the previous discussion presented in Section III, Soundness Analysis, describing health manpower resources, distribution patterns and unmet needs in Korea, it is readily apparent that there is an acute shortage of readily available curative health services at the community level. Furthermore, past experience has demonstrated that highly-trained physicians would be a very expensive way of providing such services and unsuited to the educational experiences of physicians who are trained to use advanced surgical, medical and diagnostic techniques. There is sufficient evidence from throughout the world, including demonstration projects in Korea, to show that a significant portion of curative health services can be safely and effectively delivered by health workers with less training than physicians while under the supervision of physicians trained to accept this responsibility. Such "physician assistants" or "Physician Extenders" are trained to skillfully recognize the more common conditions which can be effectively treated without direct physician supervision in every instance. More complicated or unclear conditions would receive immediate and direct referral by the Physician Extender (P.E.) to a physician with whom referral arrangements have been made.

Thailand, Truk, the United States and others have decided that new categories of health workers should be trained to fill the P.E. role. Others, including Pakistan, India, Indonesia and Nigeria, are redefining the roles

*Some of the basic tasks to be performed in establishing a primary health care system are outlined in "Primary Care Practice Framework", Family Health Care, Inc. (draft paper), January 30, 1975.

of existing categories of health workers to fill this need. In Korea, it is not yet clear whether one or more new categories of workers will be required. It may be that a combination of low-level services from a village health worker and a more sophisticated level of curative services from midwives and nurses would be suitable. In either case, one of the principal outputs of the Health Demonstration Project will be to demonstrate the feasibility of one or more forms of P.E. systems.

The successful implementation of a P.E. program is dependent on their utilization within a receptive medical environment where comprehensive health efforts are underway. In particular, association with a respected medical training institution is essential. Equally important is the preparation of allied health professions for the delineated roles to be filled by the P.E. The education of P.E.'s must emphasize the development of competence in carrying out specific tasks, rather than acquiring knowledge of physiological systems, biological relationships or disease theory. The P.E. must be carefully instructed to accurately identify certain common diseases, confounding conditions and contra-indications to routine treatment. Their employment must take into consideration their constant need for supervision, referral resources and continuing professional growth.

For these reasons, a program for the preparation of P.E.'s will be carefully phased. The initial step will be an assessment of health manpower utilization patterns in Korea at the present time, including those being tested in demonstration projects. Such an assessment will take into consideration the populations being served, the activities and objectives of the services, health care needs, successful and unsuccessful experiences with various forms of health care delivery by medical and para-medical workers, and the institutional resources in areas where P.E.'s might serve, including administrative support systems. This assessment is to be

carried out by a highly qualified team, under the direction of the KHDC. The team members will be selected on the basis of their knowledge of the health needs of low-income families, their familiarity with various health care models being employed in different nations, and their reputations for objectivity and competence. The team shall include not only physicians but other professional health workers. It will be the responsibility of the team to:

Identify the types of expended medical care services which could be safely delivered by trained P.E.'s under medical supervision; and

Recommend the categories of workers, existing and new, who might best provide the above services.

Although emphasis is being placed on primary medical care at the community level, there is no intention of excluding promotive and preventive health services which might be extended.

Shortly after the formation of the Manpower Division in KHDC, two members of the Division, one of whom is a Medical Educator, shall begin a study-observation tour lasting up to 90 days to observe Physician Extender activities in other nations and to learn the concepts and techniques in designing suitable teaching plans and curricula for Korean conditions. A third person from the major demonstration site should be similarly trained once the area has been selected. This third person should be either a full-time member of the field project staff or a key person in the health training facility in the gun or province where the demonstration project is to be conducted. Upon their return, a period of up to nine months of these trainers' time will be devoted to the development of the P.E. program including plans, curricula and related details.

Beginning in the fall of 1976, from 12 to 15 candidates for P.E. training shall have been selected for an intensive full-time course of training lasting for approximately one year. It is advisable for all of these P.E.'s to be placed in a single gun of some 200,000 population, giving a ratio of from 13-15,000 people per P.E. Other guns in the demonstration area without P.E.'s will provide comparative data for the evaluation of the P.E. effort. During training, demonstration project personnel funds may be used for providing daily stipends for the P.E. trainees in that it will be unlikely that a sufficient number of suitable candidates will be available who are already in the demonstration site area. A contractual arrangement is to be concluded with each candidate accepting training to serve the Project for at least two months in return for each month of training received.

Prior to the onset of P.E. training, a detailed evaluation plan, including the necessary allocation of funds, shall be approved by the National Health Council.

C. Loan Project Conditions Precedent, Covenants and Milestones

1. Conditions Precedent

Following are the draft conditions precedent to be included in the loan agreement for this project:

a. An opinion of the Minister of Justice of the Borrower that this Loan Agreement has been duly authorized or ratified by, and executed on behalf of, the Borrower and that it constitutes a valid and legally binding obligation of the Borrower in accordance with its terms;

b. Statements of the names of the persons who will act as the representatives of the Borrower pursuant to the Loan Agreement, together with evidence of their

authority and a specimen signature of each such person, certified as to its authenticity by either the person rendering the legal opinion or the person executing the Loan Agreement;

(c) Evidence of the legal establishment of the Korea Health Development Corporation (KHDC) as an autonomous entity along with the following: (i) the Corporation's Articles or other governing rules, and (ii) a functional mission statement for KHDC outlining its responsibilities and duties, and (iii) an explanation of the role of the KHDC in implementing the project. The supporting documentation specified in sub-items (i) through (iii) above should conform with the Project Description included in Annex A to this Agreement.

(d) Evidence of the establishment by the Economic Planning Board (EPB) of a National Health Council (NHC) along with the following: (i) the Council's governing rules, (ii) a functional mission statement for NHC outlining its responsibilities and duties, and (iii) an explanation of the role of NHC in implementing the project. The supporting documentation specified in sub-items (i) through (iii) above should conform with the Project Description included in Annex A to this Agreement.

(e) Evidence of the establishment by EPB of a National Health Secretariat, staffed and administered by the Korea Development Institute, along with an explanation of the Secretariat's functions and duties and of its role in implementing the Project. Such explanation should conform with the Project Description included in Annex A to this Agreement.

(f) A statement explaining the interrelationships to exist among the KHDC, the NHC, and the Secretariat and between these three entities and other entities of the Borrower concerned with the delivery of health services to the Korean population. This statement should specifically delineate discrete functional responsibilities for the KHDC and the Health Planning Unit being assisted by AID Grant Project No. 489-11-590-708, and describe areas of productive interaction and collaboration between the two entities.

(g) A general implementation plan for the entire five years of the Project; and a more comprehensive, detailed plan for the first year of the Project which identifies desired outputs, specifies quantitative targets for such outputs whereever possible, and schedules inputs in a manner to produce such outputs.

(h) A proforma financial plan for the Project including a schedule of expenditures by category and a schedule of funding by source which demonstrates that funds required for the Project will be made available on a timely basis;

(i) A full description of the procedures for budgeting and expending all Project funds.

(j) A list of criteria for selecting sites for health demonstration projects approved by the KHDC Board of Directors and the National Health Council;

(k) Such other terms and conditions as A.I.D. may deem advisable.

3.1.2. Conditions Precedent to Demonstration Projects

Unless A.I.D. otherwise agrees in writing, prior to any disbursements on health demonstration projects other than the costs of planning and designing such projects, the Borrower shall furnish A.I.D., in form and substance satisfactory to A.I.D.:

(a) Evidence that the site for the demonstration project satisfies the previously approved selection criteria;

(b) Evidence of a program approved by the National Health Council for the training, deployment, and utilization of physician extenders to be used in various demonstration projects.

(c) Evidence that all necessary legal and administrative measures have been taken to facilitate the utilization of physician extenders and other desired innovations in the delivery of health services in the demonstration project area.

(d) A detailed implementation plan and budget for the demonstration project.

(e) A detailed evaluation plan that includes the selection of a control area to permit valid determination of changes induced by the project effort.

In essence, aside from Section 3.1(a) and (b) of the Loan Agreement which are standard conditions precedent found in all AID development loans, these conditions precedent are designed to ensure that AID and the ROKG agree fully on the organizations and their functions in carrying out the project; that the organizations required are actually set up prior to loan fund disbursements and that adequate accounting and other safeguards are built into the loan expenditure process.

2. Particular Covenants and Warranties Concerning the Project

SECTION 5.1. Borrower's Covenants. Except as A.I.D. may otherwise agree in writing, the Borrower covenants and agrees that it shall:

(a) Carry out the Project, or cause the Project to be carried out in conformity with Annex A to this Agreement -- Project Description, with due diligence and efficiency, and in conformity with sound financial, administrative and management practices. The Borrower shall further carry out the Project, or cause the Project to be carried out, in accordance with any contracts and procurement arrangements, and modifications thereto, approved by A.I.D. pursuant to this Agreement.

(b) Except as A.I.D. shall otherwise specify in Implementation Letters, submit to A.I.D. for its approval:

1) All bid documents and documents concerning the solicitation of proposals relating to the goods and services financed under the Loan, and any modifications thereof, prior to their issuance: and

2) All contracts financed under the Loan, and any modifications thereof, prior to their execution.

(c) Adequately maintain, repair and operate, in accordance with sound health and operational practices, all equipment financed by the Loan.

(d) Adhere to the plans and other evidence submitted by Borrower in satisfaction of Sections 3.1.1 and 3.1.2.

(e) Provide all other resources, in addition to this Loan and the Korean won requirements, necessary for the punctual and effective carrying out of the Project. In no event shall the Borrower's contribution hereunder be less than twenty-five percent (25%) of the funds contributed to the Project.

(f) Give continuing priority to the development and replication of viable health delivery systems throughout the Republic of Korea.

3. Major Project Milestones and Outputs

The major Loan Project activities and their estimated dates of completion are outlined in the Performance Network Chart of the Health Sector Loan activities (Attachment X) . A more comprehensive view of the expected Project outputs is given in the the Project Logical Framework Chart (Attachment I). Two closely inter-

related activities are the implementation of the major field demonstration(s) and the incorporation of the Physician Extender elements within the demonstration project plan. For this reason, it is desirable that two Medical educators begin their training at the earliest possible date in order for them to complete their preparations for the training of Physician Extenders in the field by the beginning of the field demonstration project(s) (about May of 1977).

As has been noted elsewhere in the PP, some of the responsibilities assigned to the National Health Secretariat may be transferred to the KHDC at the joint request of EPB and AID and approval of the National Health Council. However the following tasks should be permanently assigned to the Secretariat:

a. The evaluative research activities on the overall USAID/ROKG health development project, including the activities of the KHDC, the National Health Council, and other field efforts supported by the health loan.

b. The evaluative research functions in Item a. above are to be conducted with the cooperation of the KHDC and demonstration project staff to the greatest extent possible, with the explicit understanding that methodological design, implementation, and the analyses of results for the Council are the responsibility of the Secretariat.

c. The macro-analysis of health manpower utilization in Korea.

d. The holding of professional seminars on health care financing and inter-sectoral health planning. Other seminars and workshops are also contemplated.

Items a. and b. constitute a primary source of objective evaluative research and data validation for the Loan Project and particularly the field demonstration projects. The Secretariat should conduct a general review of the Project on an annual basis. Item c. provides a source of economic and task analysis in relation to key health manpower practices for the health service needs of low-income families. It is anticipated that the field assessment portion of this study will be conducted in close conjunction with the assessment activities of KHDC.

Under item d., at least two professional seminars are to be conducted by the Secretariat, the first of which will bring top-level decision-makers together to study inter-sectoral aspects of health planning and the impact of various policies on health. The second seminar will bring together specialists and other key interested parties to study ways by which basic health care can be effectively financed to insure their assessability to low-income population groups.

D. Monitoring Plans

Monitoring of the Health Loan Project will be provided from a number of sources:

1. The Project Development Team feels that it is critical for AID to assign a full-time, direct-hire health advisor to monitor and assist this project during at least the first 2-3 years of operations. A less desirable alternative is to assign a full-time grant- or loan-funded contract advisor who could be assisted by any residual USAID/Korea staff or TDY personnel.

2. The National Health Council and its affiliated National Health Secretariat can be expected to serve as a source of objective review and monitoring of the activities of the Loan Project in relation to its goals and functions. The Secretariat, as a unit of the highly respected Korean Development Institute, should insure the availability of accurate and valid data essential for effective monitoring. A general project review will be made annually.

3. Financial monitoring services are to be provided by the USAID Controller's Office, which will assure that AID financial regulations are met.

4. The KHDC will be responsible for an independent CPA audit of its annual fiscal records, and this audit shall be presented by the Corporation's President to the Minister of Health and Social Affairs for transmittal to the National Health Council.

5. Customary AID monitoring procedures will be used, such as periodic meetings with the Borrower, visits to demonstration project sites, requirements for quarterly reports on implementation and expenditures and annual progress reviews, AID review of contracts and bid documents prior to execution, and other monitoring of procedures particular to this project as specified in the set of conditions precedent.

E. Evaluation Plans

A number of plans have been prepared for a thorough evaluation of each aspect of the Loan Project. Noteworthy are:

1. The designation of specific evaluative research responsibilities for the National Health Secretariat which is to be established for this purpose, and is to have at its disposal approximately six percent (6%) of the Loan for this and related activities.

2. The review and approval of all KHDC plans and budgets by the National Health Council which is also to be

established for this purpose and which will include a USAID representative.

3. The formation of a Planning and Program Evaluation Division of the KHDC with a small staff of trained professionals responsible for the design and monitoring of field evaluation activities.

4. The requirement for including detailed evaluation plans as a part of all project proposals submitted to the National Health Council for approval of funding.

5. The setting aside of eight percent (8%) of field demonstration project funds for evaluation activities.

6. The specification of evaluation support responsibilities of KHDC to insure quality and comparable evaluation activities.

7. The specification that each major demonstration site receiving support by the Loan Project is to include carefully designed research control areas to insure the obtaining of valid evaluative data. Field evaluations will be conducted before, during and after the initiation of demonstration low-cost health delivery services.

F. AID Disbursement Procedures

AID disbursement procedures have yet to be developed in detail. It is expected that less than $1 million of the $5 million loan will be used for foreign currency costs incurred in the United States and other Code 941 countries. For these expenditures, financing can be arranged through standard AID letter of commitment procedures or through reimbursement to KHDC under a "direct reimbursement approval" as set out in Paragraph II.C., Manual Order 1134.1. However, over 80% of loan disbursements are expected to be for local currency costs in Korea (mostly for designing, mounting and evaluating the demonstration projects).

The Mission suggested that this local currency be generated by direct purchase of won from the ROKG. However, the AID/W Project Committee's understanding of current Agency policy on local currency financing is that the procedure for generating such local currency which has the least unfavorable balance of payments impact should be chosen -- provided that the procedure does not impede overall project progress. This policy was reaffirmed by the AAC Meeting of February 19, 1975, as documented in AAC-67A, March 4, 1975. Since the Special Letter of Credit (SLC) has proven a viable procedure for generating local currency under Loan 489-7-090 - Korea Small/Medium Scale Irrigation, the AID/W Project Committee recommends that the SLC procedure also be used for this proposed loan.

The Borrower will initially pay for local-cost project activities and claim reimbursement from the loan by submitting evidence of its expenditures on activities eligible for reimbursement. An SLC will be established (and subsequently amended) in an amount equal to 75% of the total of eligible expenditures. The Borrower will draw down against the SLC through purchase of U.S. goods.

Reimbursement will be made for a fixed percentage (75%) of actual costs. The fixed amount reimbursement method is not considered applicable to this Project since demonstration projects may span several years and there is no practical means of defining intermediate stages whose completion would permit periodic reimbursement.

SECTION V - SUMMARY

A. Summary of the Project Analyses

The economic development of Korea has had the highest priority and has demonstrated a remarkable pattern of success during the past three 5-year plans. It is expected that the Health Loan will assist the Koreans to develop a comparable capability in the health care sector through field demonstration projects, and enable skillful competition by that sector in national resource allocations.

All activities undertaken by the Korea Health Development Corporation, while outwardly technical and programmatic, must be ultimately political to produce a long-lasting, skilled delivery capacity in health. Political in this case means the recognition and artful blending of resident talent and institutional strengths into a cohesive effort serving the enlightened self-interest of all participating groups.

The conceptual strategy adopted by the Project Development Team has been conceived to engage existing organizations and talented individuals in the planned development of a dynamic health component in the economy. An important aspect of success will be the ability of this emergent component to justify budgets and gain broader support on socio-economic grounds rather than relying solely on public welfare justifications.

AID's investment intervention at this point in time can markedly influence the kind and cost of health care Korean citizens will receive in the decades ahead. It is an investment which will help create a central focus leading toward a consolidated national health strategy. And it is an investment in a national structure through which change in health delivery services can begin to be rationally extended to the whole of the social body.

B. Negotiation Status

The structural framework for the health loan demonstration project (see Section I) has been agreed to by the Ministry of Health and Social Affairs and the Economic Planning Board. The Project Development Team feels this is a significant breakthrough for improving health services in Korea and provides evidence to demonstrate a significant change on the part of the Korean Government toward improving health services to low-income people. The Project Development Team would have refrained from recommending the project if the ROKG had not agreed to adopt this strategy for initiating a process through which health services can be made more accessible and available to low-income residents.

C. Outstanding Issues

1. The budget estimates for health demonstration projects are only rough approximations. In the Project Development Team's opinion, the demonstration projects should be designed and detailed cost estimates prepared only after assessment of existing health delivery systems and initial data-collection efforts. Detailed plans and budget estimates will be required as conditions precedent to disbursement of loan funds for demonstration projects.

2. The Project Development Team believes that it is imperative to secure one full-time, direct-hire AID staff professional for at least the first three years of the project. The presence of such a professional on a day-to-day basis can make a vital contribution to effective coordination and participation of all interested parties in the Project. During the latter years of loan disbursement when a direct-hire professional is no longer present (or indeed, throughout the full five-year disbursement period of the loan if a direct-hire professional cannot be provided), the Project Development Team recommends that loan funds be used to finance the services of a full-time U.S. contract advisor. The financial plan for the Project should reserve sufficient funds in the technical assistance category to pay for such an advisor, as needed.

3. The potential success of the Project in demonstrating cost-effective approaches to delivery of health care to low-income populations depends to a large extent on the training, deployment, utilization of primary care personnel or "physician extenders". Evidence of a program for the preparation of physician extenders to be used in demonstration areas should be made a condition precedent to disbursements for demonstration projects.

4. Final planning for the KHDC should insure that its functions and activities do not duplicate or unnecessarily overlap with those of the Health Planning Project which is being grant-funded by AID. A condition precedent to initial disbursement should be a statement by the Borrower delineating discrete functional responsibilities for the KHDC and the Health Planning Unit and describing areas of productive interaction and collaboration.

AID 1020-10 (2-71)
SUPPLEMENT I

Attachment I

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1975 to FY 1981
Total U.S. Funding $5,000,000
Date Prepared: April 28, 1975

Project Title & Number: Korean Health Demonstration Loan 489-V-092

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Program or Sector Goal: The broader objective to which this project contributes:	**Measures of Goal Achievement:**		**Assumptions for achieving goal targets:**
Create and institutionalize a process which gives effective access to basic promotive, preventive and curative health services to low-income citizens at a cost affordable by the Republic of Korea.	1. Major national and local organizations concerned with health and economic development are cooperating to plan and implement innovative, low-cost health delivery projects. 2. National Economic Plan provides for broader adoption of health delivery models tested in health demonstration areas.	1. Reports of completed activities, copies of program plans, and evaluation reports covering new health projects and activities. 2. Published National Five-Year Economic Plan and copies of implementing programs issued by concerned line ministries.	1. ROKG will assign high priority to expansion of basic health services 2. Adequate Korean financial resour will be available to permit expans of services. 3. New policies and demonstration programs will be successfully implemented.

AID 1020-25 (7-71)
SUPPLEMENT I

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1975 to FY 1981
Total U.S. Funding $5,000,000
Date Prepared: April 28, 1975

Project Title & Number: Korean Health Demonstration Loan 489-V-092

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Project Purpose: 1. Establish the capability within the ROKG to plan, conduct, and evaluate low-cost, integrated health delivery projects directed primarily toward low-income families. 2. Demonstrate successfully at least one multi-gun low-cost integrated health delivery system that is replicable in other parts of Korea.	**Conditions that will indicate purpose has been achieved: End of project status.** 1. ROKG agencies concerned with health development have established organizational units and procedures for planning, conducting, and evaluating low-cost health projects on a regular basis. 2.a. Basic health services provided in demonstration area(s) to approximately 500,000 population (includes MCH, nutrition, and family planning services). b. Cost-effective mixes of health person-power are being utilized to provide primary health services. c. Community-controlled and operated health delivery system being implemented in at least one demonstration area. d. Health prepayment or insurance scheme initiated in at least one area e. Degree of increase over baseline levels in the proportion of project population enjoying access to basic health care. f. Extent to which costs of service delivery make replication attractive.	1. Organizational charts, staffing patterns, payrolls, budgets, program proposals, approved agency and national health plans, and evaluation/research studies. 2.(a) Evaluation studies, project progress reports, and health center/sub-center treatment records. 2.(b) Staffing patterns, budgets, time records, progress reports, and health records can be checked to compare costs/outputs of workers in demonstration areas with those in control area. 2.(c) Interviews, organizational records and minutes of meetings can be used to assess community participation. 2.(d) Records of insurance carrier. 2.(e) Follow-up surveys of health status and comparison with base-line survey; comparison with results in control areas. 2.(f) Comparison of family expenditures on health care prior to and following demonstration; cost comparison of services delivered.	**Assumptions for achieving purpose:** 1. Key agencies concerned will cooperate to give higher priority to the planning, implemention, and evaluation of low-cost health services. 2. There will be a high level of public and private support for the new organizational system created under the loan project. 3. Enabling legislation and new administrative regulations will facilitate program innovations. 4. Effective linkages can be established between existing activities and new project activities in the demonstration areas. 5. Adequate foreign or local technical assistance will be available as needed to initiate new activities (eg., prepayment or insurance scheme). 6. Local communities are interested in more actively participating in the programming of health service for their areas and national officials are willing to encourage such participation.

AID 1020-20 (7-71)
SUPPLEMENT I

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Project Title & Number: Korean Health Demonstration Loan 489-V-092

Life of Project:
From FY 1975 to FY 1981
Total U.S. Funding $5,000,000
Date Prepared: April 28, 1975

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Outputs:	**Magnitude of Outputs:**		**Assumptions for achieving outputs:**
1. A new semi-autonomous unit (KHDC) chartered, staffed and functioning.	1. (a). Board of Directors and nuclear staff appointed within 3 months of loan agreement. (b) Majority of staff appointed and functioning within 6 months of start-up.	1/2/3. Reports, organizational charts, budgets, and other documents which show that new organizations in existence and planning, conducting, evaluating, expanding and replicating successful research and demonstration programs.	1. ROKG will establish KHDC at a position of prominence and incluence; well-qualified executives will be appointed to KHDC Board of Directors; staff expertise will be available for starting activities within stated time period.
2. A new National Health Council to guide KHDC & assist in policy formulation.	2/3. Council and Secretariat approved and functioning.		2/3. Council and Secretariat will constitute strong support elements for KHDC and other concerned organizations.
3. A National Health Secretariat in KDI to conduct & assess research, evaluate KHDC & recommend actions to National Health Council.			
4. A program for training, deployment and utilization of primary health care workers ("physician extenders") in demonstration areas.	4. Various levels of health service and education being provided by primary health care workers and extending down to village level (at least 3 workers per myon)	4. Numbers and types of appropriately trained primary health care workers in place within project area(s) and extent to which services extended to village level.	4. Qualified and interested paramedical candidates available for training and assignment to provision of primary health services. Adequate official and private support will be provided for using paramedics provide basic health services.
5. Initiation by the KPDC of several gun-level and at least one multi-gun health care delivery project(s) capable of demonstrating innovations which enhance accessibility to primary care for low-income populations.	5.(a) Number of projects initiated and evaluated. (b) Variety of innovations successfully demonstrated. (c) Adequate referral systems established & functioning. (d) Preventive and promotive activities scheduled and carried out.	5.(a) (b) KHDC records. (c) (d) Evaluation of projects' ability to improve the distribution, efficiency, and equitability of health services, and impact on health status. Evaluations to be conducted by KHDC, Health Secretariat, and other interested groups.	
6. Assessment of health care problems and on-going programs, and dissemination of findings.	6.(a) Completion of base-line surveys. (b) Number of seminars, workshops, publications, etc.	6.(a)(b) KHDC records. Evaluation of educational and analytic quality of seminars, workshops, and publications.	
7. Research on national health development subjects relevant to expanding services for low-income groups and useful for the formulation of national policies, plans, and programs for the health sector.	7.(a) Number of research activities and reports. (b) Extent to which research findings have been utilized in national health plans.	7.(a) KHDC records. (b) Comparison of research reports and recommendations with national plans.	

AID 1060-30 (7-71)
SUPPLEMENT I

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1975 to FY 1981
Total U.S. Funding $5,000,000
Date Prepared: April 28, 1975

Project Title & Number: Korean Health Demonstration Loan 489-V-092

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
Inputs: U.S.: $5,000,000 Development Loan covering up to 75% of total project costs, covering such items as: (a) Technical assistance, Korean and external; (b) Project start-up and operational costs; and (c) Participant training (U.S., 3rd country). ROKG: Funds equal to at least 25% of total Loan Project costs.	**Implementation Target (Type and Quantity)** Joint Project Budget (estimated) breakdown): KHDC $1,381,300 National Health Secretariat $ 400,000 Field Demonstration Project $4,885,700 Total: $6,667,000	Review of financial records covering: (a) $5 million AID loan account to be established upon execution of loan agreement and use to be monitored by annual USAID reviews and audits. (b) At least $1,667,000 provided by ROKG as counterpart and disbursed on regular basis as matching funds for AID loan releases.	**Assumptions for providing inputs:** 1. ROKG agreement with project objectives and deployment of loan/counterpart funds. 2. Enactment of enabling legislation and administrative regulations to facilitate operation of new organizations and projects. 3. ROKG will appropriate sufficient funds to meet its share of the ann and total project costs.

CHECKLIST OF STATUTORY CRITERIA

(Health Demonstration Project)

Project No. 489-22-590-710

The following abbrevations are used:

FAA - Foreign Assistance Act of 1961, as amended.

FAA, 1973 - Foreign Assistance Act of 1973.

App. - Foreign Assistance and Related Programs Appropriation Act, 1974.

MMA - Merchant Marine Act of 1936, as amended.

BASIC AUTHORITY

1. FAA §103; §104; §105; §106; §107. Is loan being made

a. for agriculture, rural development or nutrition;	1.a. No.
b. for population planning or health;	1.b. Yes.
c. for education, public administration, or human resources development;	1.c. No.
d. to solve economic and social development problems in fields such as transportation, power, industry, urban development, and export development;	1.d. No.
e. in support of the general economy of the recipient country or for development programs conducted by private or international organizations.	1.e. No.

COUNTRY PERFORMANCE

Progress Towards Country Goals

2. FAA §201(b)(5), (7) & (8); §208

A. Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

2.A.(1). From 1962 through 1972 the National Income accounts show that the real value added in the agriculture sector increased by approximately 55% (a growth rate of 4.5% per year). Significantly, this period included the two drought years of 1967 and 1968; however, significant investments have been and are being made in irrigation facilities which will minimize future weather influences on production.

Beginning in 1970, the ROKG adopted a high rice price policy and significantly increased rice prices relative to other prices. Rice prices were increased 23% in 1970, 35% in 1971 and 25% in 1972. Since then prices have been increased approximately in line with increases in the general price level. These increases have provided additional incentive for farmers to use fertilizer and other inputs required to increase production.

Under loan 489-H-088 for agricultural research, substantial effort and expenditure will be made to develop and introduce new crop varieties. Under previous A.I.D. assistance, food storage capacity was improved and increased.

(2) Creating a favorable climate for foreign and domestic private enterprise and investment.

2.A.(2). Korea has taken a number of effective steps to create a favorable investment climate. A liberal foreign investment law was enacted, and intensive study is being undertaken by the ROKG of means of expanding capital markets. An investment center has been established, and domestic investment has been assisted by a number of A.I.D. loans such as the loans to the Korea Development Bank.

(3) Increasing the public's role in the developmental process.

2.A.(3). Koreans are basically a homogeneous people whose society is relatively free and politically stable. Korea does not possess deep sectional, religious or social cleavages. Korea's rapid economic development benefits increasingly larger segments of the population.

(4)(a) Allocating available budgetary resources to development.

2.A.(4)(a). Korea has wisely allocated its resources in such a way as to maximize its economic development while maintaining sufficient military forces to insure a relative freedom from threatened external aggression.

(b) Diverting such resources for unnecessary military expenditure (See also Item No. 20) and intervention in affairs of other free and independent nations.) (See also Item No. 11).

2.A.(4)(b). Korea is not so diverting such resources and is not intervening in other free and independent nations' affairs.

(5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.

2.A.(5). Korean land reform programs have eliminated the large landholding class and have created a large number of independent farmers who own their own small farms. The ROKG has assisted in the establishment of a number of farm and fishery cooperatives which have been of significant assistance to the farm and fishery communities.

Korea basically has a private enterprise type economy. AID has assisted the ROKG in its efforts to reform

the equity of tax rates and collection procedures. These reforms have greatly increased both the amount of taxes collected and the equity with which the program is administered.

On October 17, 1972, the President of Korea declared martial law, giving as reasons domestic and international political developments. Under the martial law, political liberties were restricted and the Korean press was placed under tight control. A new constitution has since been adopted and martial law lifted on December 13, 1972, but restrictions on political activity and press freedom continue.

(6) Willing to contribute funds to the project or program.

2.A.(6). The ROKG will provide at least 25% of the total cost of the project.

(7) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

2.A.(7). The ROKG has made significant progress in its efforts to provide a better life for the average Korean citizen. The Government has encouraged the rapid expansion of small and medium industry, stimulated the development of farmer credit unions and fishing cooperatives and has helped in many other ways to better the lot of its people. Korea already has a high literacy rate and is concerned about extending better health care to all its people.

B. Are above factors taken into account in the furnishing of the subject assistance?

2.B. Yes.

Treatment of U.S. Citizens and Firms.

3. FAA §620(c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government?

3. No such situation is known to exist.

4. FAA §620(e)(1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities?

4. No such actions are known to have occurred.

5. FAA §620(o); Fishermen's Protective Act §5. If country has seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters,

5. Korea has not so seized or imposed any penalty or sanction.

a. has any deduction required by Fishermen's Protective Act been made?

5.a. Not applicable.

b. has complete denial of assistance been considered by A.I.D. Administrator?

5.b. Not applicable.

Relations with U.S. Government and Other Nations

6. FAA §620(a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba?

6. No.

7. FAA §620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement?	7. Yes, the required determination has been made.
8. FAA §620(d). If assistance is for any productive enterprise which will compete in the United States with United States enterprise, is there an agreement by the recipient country to prevent export to the United States of more than 20% of the enterprise's annual production during the life of the loan?	8. The loan is not intended for such purposes.
9. FAA §620(f). Is recipient country a Communist country?	9. No.
10. FAA §620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression?	10. No.
11. FAA §620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property?	11. No such situation is known to have occurred.
12. FAA §620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the A.I.D. administrator within the past year considered denying assistance to such government for this reason?	12. Korea has instituted such a program.
13. FAA §620(n). Does recipient country furnish goods to North Viet-Nam or permit ships or aircraft under its flag to carry cargoes to or from North Viet-Nam?	13. No.

14. FAA §620(q). Is the government of the recipient country in default on interest or principal of any A.I.D. loan to the country?

14. No.

15. FAA §620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

15. No.

16. FAA §620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the A.I.D. Administrator in determining the current A.I.D. Operational Year Budget?

16. Korea is not a member of the United Nations.

17. FAA §481. Has the government of recipient country failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully?

17. No.

18. FAA, 1973 §29. If (a) military base is located in recipient country, and was constructed or is being maintained or operated with funds furnished by U.S., and (b) U.S. personnel carry out military operations from such base, has the President determined that the government of recipient country has authorized regular access to U.S. correspondents to such base?

18. See Presidential Determination No. 74-14, made January 28, 1974.

Military Expenditures

19. FAA s620(s). What percentage of country budget is for military expenditures? How much of foreign exchange resources spent on military equipment? How much spent for the purchase of sophisticated weapons systems? (Consideration of these points is to be coordinated with the Bureau for Program and Policy Coordination, Regional Coordinators and Military Assistance Staff (PPC/RC).)

19. For 1974, 29.5% of the budget is for military expenditures, including an estimated $15 million of foreign exchange resources for military equipment. No money for sophisticated weapons has been spent since the statutory limitation became effective.

Conditions or The Loan

General Soundness

20. FAA s201(d). Information and conclusion on reasonableness and legality (under laws of country and the United States) of lending and relending terms of the loan.

20. The interest rate is not higher than Korea's applicable legal rate of interest. Re the reasonableness of the loan terms, see the PP, Section III F.

21. FAA s201(b)(2); s201(e). Information and conclusion on activity's economic and technical soundness. If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds $100,000, has country submitted to A.I.D. an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

21. The ROKG has submitted an application for such funds containing the requisite assurances. Re the project's economic and technical soundness, see the PP, Section III and Attachment XII.

22. FAA s201(b)(2). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

22. See the PP, Section III F and Attachment X.

23. FAA s201(b)(1). Information and conclusion on availability of financing from other free-world sources, including private sources within the United States.

23. Financing of this project on terms comparable to those proposed for this loan is believed not to be available from other free-world sources, including private sources within the U.S.

24. FAA s611(a)(1). Prior to signing of loan will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the United States of the assistance?

24. Yes.

25. FAA s611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of loan?

25. ROKG officials anticipate that legislation to authorize new organizations can be passed early in the next (September) session of National Assembly. Presidential and administrative decrees will be issued to authorize interim and preparatory activities.

26. FAA s611(e). If loan is for Capital Assistance, and all U.S. assistance to project now exceeds $1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

26. The Mission Director has so certified. See Annex B.

Loan's Relationship to Achievement of Country and Regional Goals

27. FAA s207; s113. Extent to which assistance reflects appropriate emphasis on; (a) encouraging development of democratic, economic, political, and social institutions; (b) self-help in meeting the country's food needs; (c) improving availability of trained manpower in the country; (d) programs designed to meet the country's health needs; (e) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (f) integrating women into the recipient country's national economy.

27. New institutions will be designed to permit broader-based public counsel and participation in health programming at the national level and in the field demonstration areas; (b) project should contribute to healthier farm labor force with a consequent positive impact on productivity; (c) project will give high priority to upgrading skills of health personnel and better utilization of health manpower; (d) this project is aimed specifically at developing better health care systems; (e) project hopes to maximize participation of private sector, cooperatives, and civic groups in improving health care; and (f) project's priority target group will be younger children and women of child-bearing age. Many of the providers of service under the proposed new system will be women.

28. FAA §209. Is project susceptible of execution as part of regional project? If so why is project not so executed?

28. No.

29. FAA §201(b)(4). Information and conclusion on activity's relationship to, and consistency with, other development activities, and its contribution to realizable long-range objectives.

29. The project will be an important element in USAID/ROKG effort to give higher priority to health development in the national economic plan. It is very supportive of other activities in the health and population area.

30. FAA §(b)(9). Information and conclusion on whether or not the activity to be financed will contribute to the achievement of self-sustaining growth.

30. Project will contribute directly to improved health status, which is normally perceived as a valuable end-product of the development process.

31. FAA §209. Information and conclusion whether assistance will encourage regional development programs.

31. If successful, the project will provide needed prototypes for health planning and low-cost health delivery systems which could be adapted by other countries in the region. The project is also supportive of WHO's regional effort to upgrade national health planning.

32. FAA s111. Discuss the extent to which the loan will strengthen the participation of urban and rural poor in their country's development, and will assist in the development of cooperatives which will enable and encourage greater numbers of poor people to help themselves toward a better life.

32. The project should increase the service outreach activities of health providers and thereby increase positive contacts between health workers and urban/rural poor. The project is structured to encourage extensive community participation in the design and implementation of health care demonstration activities.

33. FAA s201(f). If this is a project loan, describe how such project will promote the country's economic development taking into account the country's human and material resources requirements and relationship between ultimate objectives of the project and overall economic development.

33. The project should lead to a healthier population which can therefore be a more economically productive population.

34. FAA s281(a). Describe extent to which the loan will contribute to the objective of assuring maximum participation in the task of economic development on the part of the people of the country, through the encouragement of democratic, private and local governmental institutions.

34. Project seeks to make government health workers more responsive to the needs of the people and to encourage expanded community representation and participation in health planning.

35. FAA s281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

35. Project is responsive to wide-spread desire for expanding access to health care. Project seeks to attract more of Korea's intellectual talent into the health field to develop innovative approaches to delivering health care.

36. FAA §201(b)(3). In what ways does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities?

36. The project should produce a significant positive impact on the well-being of people -- and these constitute one of the country's most valuable resources.

37. FAA §601(a). Information and conclusions whether loan will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

37. There is no direct relationship between this loan and the objectives stated in Sec. 601(a) of the Foreign Assistance Act, except for improving the technical efficiency of low-cost health delivery systems.

38. FAA §619. If assistance is for newly independent country, is it furnished through multilateral organizations or plans to the maximum extent appropriate?

38. Korea is not a newly independent nation.

Loan's Effect on U.S. and A.I.D. Program.

39. FAA §201(b)(6). Information and conclusion on possible effects of loan on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving the U.S. balance of payments position.

39. It is expected that all of the foreign commodities and consulting services to be procured under this loan will be obtained from U.S. sources.

40. FAA §202(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources.

40. Within the general project guidelines, the project will make maximum utilization of private enterprise to provide goods and services to the project. The beneficiaries of the project will be private individuals.

41. FAA §601(b). Information and conclusion on how the loan will encourage U.S. private trade and investment abroad and how it will encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

41. Project design encourages participation by representatives of private sector in health planning activities.

42. FAA §601(d). If a capital project, are engineering and professional services of U.S. firms and their affiliates used to the maximum extent consistent with the national interest?

42. Not applicable.

43. FAA §602. Information and conclusion whether U.S. small business will participate equitably in the furnishing of goods and service financed by the loan.

43. The loan agreement will so provide.

44. FAA §620(h). Will the loan promote or assist the foreign aid projects or activities of the Communist-Bloc countries?

44. No.

45. FAA §621. If Technical Assistance is financed by the loan, information and conclusion whether such assistance will be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis. If the facilities of other Federal agencies will be utilized, information and conclusion on whether they are particularly suitable, are not competitive with private enterprise, and can be made available without undue interference with domestic programs.

45. All such assistance will be furnished from private sources on a contract basis.

Loan's Compliance with Specific Requirements

46. FAA §110(a); §208(e). In what manner has or will the recipient country provide assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the Loan is to be made?

46. The loan agreement will so provide and the planned administrative arrangements will assure it.

47. FAA §112. Will loan be used to finance police training or related program in recipient country?

47. No.

48. FAA §114. Will loan be used to pay for performance of abortions or to motivate or coerce persons to practice abortions?

48. No.

49. FAA §201(b). Is the country among the 20 countries in which development loan funds may be used to make loans in this fiscal year?	49. Yes.
50. FAA §201(d). Is interest rate of loan at least 2% per annum during grace period and at least 3% per annum thereafter?	50. Yes.
51. FAA §201(f). If this is a project loan, what provisions have been made for appropriate participation by the recipient country's private enterprise?	51.
52. FAA §604(a). Will all commodity procurement financed under the loan be from the United States except as otherwise determined by the President?	52. Commodity procurement will be limited to Korea and Code 941 countries.
53. FAA §604(b). What provision is made to prevent financing commodity procurement in bulk at prices higher than adjusted U.S. market price?	53. No part of this loan will be used for bulk commodity procurement.
54. FAA §604(d). If the cooperating country discriminates against U.S. marine insurance companies, will loan agreement require that marine insurance be placed in the United States on commodities financed by the loan?	54. Yes.
55. FAA §604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity?	55. No part of this loan will be used for such procurement.
56. FAA §604(f). If loan finances a commodity import program, will arrangements be made for supplier certification to A.I.D. and A.I.D. approval of commodity as eligible and suitable?	56. Not applicable.

57. FAA §608(a). Information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.

57. U.S. Government excess property is not appropriate for use in the activity to be financed hereunder.

58. FAA s611(b); App. s101. If loan finances water or water-related land resource construction project or program, is there a benefit-cost computation made, insofar as practicable, in accordance with the procedures set forth in the Memorandum of the President dated May 15, 1962?

58. Not applicable.

59. FAA s611(c). If contracts for construction are to be financed what provision will be made that they be let on a competitive basis to maximum extent practicable?

59. Not applicable.

60. FAA s612(b); s636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the United States are utilized to meet the cost of contractual and other services?

60. Korea is not an excess currency country. Local costs in excess of 25% will be contributed by Korea.

61. App. s113. Will any of loan funds be used to acquire currency of recipient country from non-U.S. Treasury sources when excess currency of that country is on deposit in U.S. Treasury?

61. Korea is not an excess currency country.

62. FAA s612(d). Does the United States own excess foreign currency and, if so, what arrangements have been made for its release?

62. No.

63. FAA s620(g). What provision is there against use of subject assistance to compensate owners for expropriated or nationalized property?	63. The loan agreement stipulates that only eligible commodities and services can be financed under the loan.
64. FAA s620(k). If construction of productive enterprise, will aggregate value of assistance to be furnished by the United States exceed $100 million?	64. Not applicable.
65. FAA s636(i). Will any loan funds be used to finance purchase, long-term lease, or exchange of motor vehicle manufactured outside the United States or any guaranty of such transaction?	65. No.
66. App. s103. Will any loan funds be used to pay pensions, etc., for military personnel?	66. No.
67. App. s105. If loan is for capital project, is there provision for A.I.D. approval of all contractors and contract terms?	67. Not applicable.
68. App. s107. Will any loan funds be used to pay UN assessments?	68. No.
69. App. s108. Compliance with regulations on employment of U.S. and local personnel. (A.I.D. Regulation 7).	69. The loan agreement will so provide.
70. App. s110. Will any of loan funds be used to carry out provisions of FAA §209(d)?	70. No.
71. App. s114. Describe how the Committee on Appropriations of the Senate and House have been or will be notified concerning the activity, program, project, country, or other operation to be financed by the Loan.	71. The Committee will be given the requisite notice before the loan is authorized.
72. App. s601. Will any loan funds be used for publicity or propaganda purposes within the United States not authorized by Congress?	72. No.

73. MMA s901. b; FAA s640 C.

(a) Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed with funds made available under this loan shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates.

73.a. The loan agreement will so provide.

(b) Will grant be made to loan recipient to pay all or any portion of such differential as may exist between U.S. and foreign-flag vessel rates?

73.b. No.

74. Section 30 and 31 of PL 93-189 (FAA of 1973). Will any part of the loan be used to finance directly or indirectly military or paramilitary operations by the U.S. or by foreign forces in or over Laos, Cambodia, North Vietnam, South Vietnam, or Thailand?

74. No.

75. Section 37 of PL 93-189 (FAA of 1973); App. s. 111. Will any part of this loan be used to aid or assist generally or in the reconstruction of North Vietnam?

75. No.

76. App. s112. Will any of the funds appropriated or local currencies generated as a result of AID assistance be used for support of police or prison construction and administration in South Vietnam or for support of police training of South Vietnamese?

76. No.

77. App. s604. Will any of the funds appropriated for this project be used to furnish petroleum fuels produced in Southeast Asia for use by non-U.S. nationals?

77. No.

A.I.D. Loan No. 489-J-092
Project No. 489-22-590-710

DRAFT

LOAN AUTHORIZATION

Provided from: Population Planning and Health

(Korea: Health Demonstration Project)

Pursuant to the authority vested in me as Administrator, Agency for International Development ("A.I.D."), by the Foreign Assistance Act of 1961, as amended, (the "Act") and the Delegations of Authority issued thereunder, I hereby authorize the establishment of a loan pursuant to Part I, Chapter I, Section 104 and Chapter 2, Title I, the Development Loan Fund, to the Government of the Republic of Korea ("Borrower") of not to exceed Five Million Dollars ($5,000,000) to be made available to assist in financing the foreign exchange and local currency costs of certain technical assistance, training, and health equipment, materials and supplies, including motor vehicles, to (i) establish the capability within the Korean Government to plan, conduct and evaluate low-cost health delivery systems directed primarily toward low-income Korean families, and (ii) demonstrate successfully a multi-gun low-cost integrated health delivery system that is replicable in other parts of Korea. The loan is to be subject to the following terms and conditions:

1. Interest Rate and Terms of Repayment

This loan shall be repaid by the Borrower within forty (40) years after the date of the first disbursement thereunder including a grace period of not to exceed ten (10) years from the date of first disbursement. The interest on the outstanding balance of the loan, including any due and unpaid interest thereon, shall accrue from the date of the first disbursement at the rate of two percent (2%) per annum during the grace period and at the rate of three percent (3%) per annum throughout the remaining life of the loan.

2. Currency of Repayment

Provision shall be made for repayment of the loan and payment of the interest in United States dollars.

3. Other Terms and Conditions

a. Unless A.I.D. otherwise agrees in writing, equipment, materials and services financed under this loan shall have their source and origin in Korea and/or in countries under A.I.D. Geographic Code 941 (Selected Free World).

b. The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

c. Prior to initial disbursement of loan funds, Borrower must submit in form and substance satisfactory to A.I.D.:

i - Evidence that the Korea Health Development Corporation has been legally established as a semi-autonomous entity:

ii - Evidence that the Economic Planning Board has established a National Health Council and a National Health Secretariat

iii - A statement explaining the interrelationships among these three entities.

iv - An implementation plan and corresponding financial plan for the Project

d. Prior to any disbursement for demonstration project, other than the costs of planning and designing such project, Borrower must submit in form and substance satisfactory to A.I.D.:

i - Evidence that the project site satisfies previously approved site selection criteria;

ii - A detailed project plan and budget estimate;

iii - A detailed plan for evaluating project results.

Attachment IV

AID-DLC/P-
Annex B

CERTIFICATION PURSUANT TO SECTION 611(e) OF
THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED

I, Michael H. B. Adler, the principal officer of the Agency for International Development in Korea, having taken into account, among other things the maintenance and utilization of projects in Korea previously financed or assisted by the United States, do hereby certify that in my judgment Korea has both the financial capability and the human resources capability to effectively utilize the capital assistance to be provided under the Health Demonstration Project.

Michael H. B. Adler

9 May 1975
Date

OPTIONAL FORM NO. 10
5010-104

Attachment V

UNITED STATES GOVERNMENT

Memorandum

TO : Mr. Michael H. B. Adler, Director DATE: April 24, 197[illegible]

FROM : James R. Brady, HP

SUBJECT: Call on Minister of Health and Social Affairs, Mr. Koh, Jae-Pil

1. From 1000 to 1040 A. M. today Dr. Karlin and Mr. Norris of the Loan Team, Mr. Lee, Yong Hwan of USAID/HP and I met with Minister Koh and his principal staff members. The primary purpose of the meeting was for the Loan Team to make a courtesy call before their departure and to acknowledge the support given to the Team by the MHSA staff.

2. I reported to Minister Koh that the AID Team was completing its work and expressed appreciation for the cooperation provided by the Ministry's staff. I indicated that we regretted that tight time constraints had precluded the team from working more closely with some of the bureaux represented in the meeting, but hoped that these would be actively involved in planning and implementation activities which would follow.

Minister Koh indicated his understanding of the pressures under which the team worked. He was lavish in his expression of thanks to "the American Government and the American people for their assistance to Korea" and indicated that the government was especially grateful for the Team's efforts in supporting health.

Dr. Karlin and Mr. Norris expressed their admiration and thanks for the staff support of MHSA

3. The Minister then expounded on the Korean Health situation and included the following points:

(a) A highly developed and sophisticated medical system was adopted from the West, but it benefits only a few well-to-do Koreans. Considering the generally low level of per capita income, the present system is not serving the people. There must be efforts to reach the disadvantaged in the rural areas and also in the urban areas.

(b) The education of doctors is very expensive and the doctors in turn charge patients extremely high fees. The doctors are thus responsible for the very costly medical care system in Korea. (Minister Koh noted that he could be critical of doctors since he was a lawyer.)

(c) Current physician - patient ratio's should be readjusted and a distribution of physicians should be made to create more equitable case loads, especially "poor resident areas" (b) Primary health care should be provided by paramedical personnel such as nurses and midwives.

(e) Although many communicable diseases have been eradicated by the MHSA's efforts, others remained (i.e., TB, VD). While the know-how exists to eliminate these, resources are inadequate. Because of the aggressiveness of North Korea, Korea has had to devote resources to security which might otherwise be used in health.

(f) The AID Health Loan of $5 million would provide the MHSA with opportunities to provide more health services.

Comment:

4. This was the first meeting with Minister Koh which devoted so much time to specific health problems and the need for new approaches to these problems (such as utilizing paramedics to provide health services). Other MHSA staff members have indicated in recent weeks that they think the Minister is seriously concerned about introducing new health care strategies. This new concern was given as the reason why the Minister had accepted the broad-based project organization recommended by the AID Loan Team, instead of a more narrow proposal advocated by his staff.

Attachment VI

AGREEMENT ON DELEGATION OF HEALTH SERVICE
(English Translation)

The Governor of Kyongsang-Namdo, for the purpose of conducting a demonstration project in community medicine program covering the entire area of Koje County, Kyongsang-Namdo, hereby delegates the authority to execute the health services including prevention and treatment of diseases to the Koje Community Health Care Corporation which is to plan and implement the Koje Community Health Care Program under the financial assistance provided through the World Council of Churches Christian Medical Commission.

1. The Governor of Kyongsang-Namdo, in accordance with the provision of Article 65, Medical Law, delegates authority to execute the health service covering the entire area of Koje County being administered by the Koje County Health Center, to the Koje Community Health Care Corporation which is to faithfully execute the delegated service through the Koje Community Health Care Center now being established.

2. The local administrative functions being administered by the Koje County Health Center will be excluded from the delegated service, and will be hereafter administered by the Koje County Health Center Director.

3. The Koje Community Health Care Corporation will prepare necessary facilities, staffing and operational system of the Koje Community Health Care Center for execution of the delegated service and the health services will be transfered to the Koje Community Health Care Corporation, as soon as it is ready to take over from the Koje County Health Center Director.

4. The Koje County Chief may provide funds and materials required for the implementation of the delegated health services.

5. The Koje Health Center Director will supervise the delegated health services, and may, if necessary, concurrently assume the post as the Associate Director for Primary Care System, Koje Community Health Care Center.

6. Any details required for implementation of the agreement will be decided by agreement between the Koje County Chief and the Director, Koje Community Health Care Center.

March 31, 1975

Kang, Yong-Soo
Governor
Kyongsang-Namdo

Chung Hi-Sup
Chairman
Koje Community Health
Care Corporation

Korea PP
ATTACHMENT # VII

PRELIMINARY ESTIMATE OF LOAN PROJECT OBLIGATIONS OF ROKG AND USAID BY YEAR

Agency	FY 1976	1977	1978	1979	1980	Total
A. KHDC						
ROKG	$ 48,346	$ 69,065	$ 72,518	$ 75,971	$ 79,425	$ 345,325
USAID	$145,036	$207,195	$ 217,555	$ 227,915	$ 238,274	$1,035,975
Total	$193,338	$276,260	$ 290,073	$ 303,886	$ 317,699	$1,381,300
B. Demonstration Projects						
ROKG	$ 50,000	$146,675	$ 325,000	$ 350,000	$ 350,000	$1,221,675
USAID	$150,000	$439,025	$ 975,000	$1,050,000	$1,050,000	$3,664,025
Total	$200,000	$585,700	$1,300,000	$1,400,000	$1,400,000	$4,885,700
C. National Health Secretariat						
ROKG	$ 25,000	$ 18,750	$ 18,750	$ 18,750	$ 18,750	$ 100,000
USAID	$ 75,000	$ 56,250	$ 56,250	$ 56,250	$ 56,250	$ 300,000
Total	$100,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 400,000
Grand Total						
ROKG	$123,345	$234,490	$ 416,268	$ 444,721	$ 448,175	$1,666,999
USAID	$370,036	$702,470	$1,248,805	$1,334,165	$1,344,524	$5,000,000
Total	$493,381	$936,960	$1,665,073	$1,778,886	$1,792,699	$6,666,999

ATTACHMENT # VIII

ESTIMATED BUDGET SUMMARY
July 1975 - June 1980

	Local Currency	U.S. Currency
A. Korean Health Development Corporation		
1. Personnel:		
a. Professional: 93 man-years at an average of $5,292 per man-year including fringe. = $492,156 (rounded to $492, 200)		
b. Non-professional: 46 man-years at average of $2, 300/yr. =$105, 800	$ 598, 000	
2. Equipment, including furniture, office equipment, photocopier=$42, 620 (U.S. Commodities = $15, 000 & Local commodities =$27, 620)	$ 27, 620	$ 15, 000
3. Travel and International Training		
a. Transportation:		
(1) Domestic:		
a) KHDC staff, 360 trips/yr. x 5 yrs. at $20/trip=36, 000		
b) Korean Consultants, 120 trips@$20 per trip=$2, 400		
(2) International:		
a) Training for up to one year for 3 persons. Travel=$2, 000x3 =$6, 000		
b) Study tours, six persons for up to 2 months, $2, 000/trip=$12, 000		
c) Trainers of Physician Extenders, three persons @$2, 000/trip=$6, 000		
Total Transportation: $62, 400	$ 38, 400	$ 24, 000

TABLE (continued)

	Local Currency	U.S. Currency
b. Per Diem (1) Domestic: a) KHDC staff, 1800 trips x 4 days/trip @$16/4ay=115,200. b) Korean Consultants, 120 trips x 4 days @$20 per day=9,600. (2) International Per Diem & Training Fees: a) Training of three persons up to one year @$10,000 including fees=$30,000. b) Study tours, six people for 60 days each @$20=7,200. c) Trainers of Physician Extenders, three persons for 90 days each @$20/day=5,400.		
Total Per Diem: $167,400	$124,800	$ 42,600
c. Local Consultants Fees: 480 days at $20 average per day=$9,600.	$ 9,600	
(Total Travel, A+B+C=$239,400)		
4. Technical Assistance a. Long-term Advisor and family * Salary &expenses, 5 man-years @47,900 per year= $239,500. * Note: As indicated in PP text, these are contingency funds reserved for up to five person-years of contractual advisory services in the event that a full time direct-hire AID advisor cannot be assigned. Any unrequired balances could also be used to finance short term consultants.		
Sub-Total $239,500		$239,500

	Local Currency	U. S. Currency
b. Short-term Consultants (US & 3rd Country) (1) Transportation, Local, 24 trips @$20=$480. (2) Transportation, International, 10 trips @$1,7.00=$17,000 (3) Per diem, Local: 100 days, average = @$30=$3,000. (4) Per diem International: 20 days @$25=$500. (5) Consultant Fees: 100 days at average @$78 /day=$7,800		
Sub-Total: $31,780	$ 3,480	$ 28,300
Total: $271,280		
5. Direct Costs: a. Rent, 5 years at $6,000 per year = $30,000. b. Conferences, including Technical support to field, including workshops, research support, operational costs. $100,000. c. Publications & health education $60,000. d. Utilities @$300/mo x 60 months $18,000. e. Vehicles, 3, and maintenance. $15,000 U.S. currency, $7,000 local.		
Total Direct: $230,000	$215,000	$ 15,000
Total U.S. currency cost KHDC, $364,400 Local currency: $1,016,900. Total all KHDC: $1,381,300		

	Local Currency	U.S. Currency
B. Demonstration Project(s)		
1. Personnel (46%),* $2,223,000		
2. Equipment & supplies, including medical, sanitation, communical disease control, MCH, family planning, vehicles, bicycles. (26%), $1,280,000 (Local procurement=$830,000; U.S. Commodities=$450,000)		
3. Domestic Travel, (2%), $98,800		
4. Technical Assistance, (1%), $62,000 ($12,000 for local support costs and $50,000 for $ contracts)		
5. Direct Costs:		
a. Rent.....		
b. Conferences & training activities, (5%), $247,000.		
c. Utilities, fuel, (1%) $40,000		
d. Construction of small treatment facilities (2%) $120,000		
e. Contracts and investments in health care financing, research, (5%), 247,000.		
f. Evaluation and operations research, (8%) $395,200.		
g. Reserve for contingencies (4%) $172,700		
Totals.....	$4,385,700	$ 500,000
Total Demonstration Costs: $4,885,700		

(*Percentages are rounded and based on Total Demonstration Costs of $4,885,700.)

	Local Currency	U.S. Currency
C. Health Development Secretariat		
1. Personnel		
a. Professional: 15 man-years @$12,000 per years =$180,000		
b. Non-professional: 7 man-years @$2,300 per years=$16,000	$ 196,100	
2. Equipment, $32,200	$ 24,200	$ 8,000
3. Travel, $29,000	$ 29,000	
4. Technical Assistance, $5,000		$ 5,000
5. Direct Costs		
a. Rent and utilities -		
b. Seminars & Training 50,000		
c. Transportation 5,000		
d. Research costs 40,000		
e. Contingencies 42,700	$ 137,700	
Total Secretariat Costs: $400,000 Totals....	$ 387,000	$ 13,000
Summary of Total Project Costs		
A. KHDC: Total $1,381,300	$1,016,900	$ 364,400
B. Demonstration Project(s):$4,885,700	$4,385,700	$ 500,000
C. Secretariat: Total: 400,000	$ 387,000	$ 13,000
Grand Total:$6,667,000	$5,789,600	$ 877,400

VI. Prospects for Repayment

A. Korea's Balance of Payment Position and Debt Service Capacity

While "oil crisis" effects have greatly increased Korea's import bill and temporarily eliminated export growth (in the latter part of 1974 and probably the first half of 1975) Korea's long-term balance of payments prospects remain good, based on its past performance and favorable competitive factors.

After two relatively small BOP deficits and a large increase in foreign exchange reserves in 1972-73, Korea experienced a very large deficit in 1974 and only a small increase in gross reserves. As Table VII-1 indicates, the current account deficit increased from $309 million to over $1.8 billion in 1974. Exports were up 39% but imports expanded by 63%, mainly due to price increases. Invisible payments were also up sharply but service receipts remained the same due to a decline in revenues from Japanese tourists. Despite an increase of nearly $600 million in long-term capital inflows in 1974, another $800 million in net additional short-term credits were required to finance the large deficit.

Due to the international recession, Korea's exports began a downward trend in the second half of 1974 which is likely to last through the first half of 1975. While the government has made an optimistic official forecast of a 32% increase in exports in 1975, the general expectation is that, while stronger in the second half, exports will be about the same for the year as a whole and that imports will be up roughly 10%. The tentative Embassy estimates shown in Table VII-1 forecast a current account deficit of $2.4 billion in 1975, which will be financed largely by long-term capital inflows, including bank loans, special IMF credits and Korea's first IBRD program loan.

Assuming an end to the current international recession, Korea should resume strong export growth and begin to narrow its BOP deficit in 1976. The government is proceeding with its long-term heavy industry plan for 1973-81, although original plan estimates have been outdated by events in 1973-74. No formal revision of the 1973-81 estimates has been made, although the estimate of total foreign capital needs has been informally increased from $10 to $14-15 billion, due to the BOP and price effects of the oil crisis.

Korea's debt-service ratio improved in 1974, as foreign exchange earnings again outpaced debt service. The ratio dropped from 13.9% in 1973 to 12.4% (see Table VII-2). Since 1970 the ratio has fallen steadily from a potentially dangerous 21% level, due partly to a shift to longer-term debt obtained on more favorable terms. This trend will be reversed in 1975 since export earnings are expected to increase very little and debt service will probably increase by about 25%, with most of the increase occurring in interest payments. The Embassy estimates in Table VII-2 that the debt service ratio will rise to approximately 15% in 1975.

For the longer term no great increase in the debt service ratio is expected, on the assumption that export growth of about 20% p.a. (or much less than in the past) is resumed in 1976. The government, which had previously expected the service ratio to decrease steadily by 1981, has informally estimated that the effect of the oil crisis on the BOP will be to increase the previously estimated ratio by 2-4% in 1981, or to about the levels prevailing in 1973-74.

B. Specific Arrangements for Repayment of Loan

Repayment of this loan will be charged against ROKG general resources. From sub-section A. above

it can be seen that the Korean economy should have no problem with undertaking this additional foreign exchange debt servicing burden. USAID further believes that ROKG revenues will be sufficient to provide budgetary resources for servicing of this proposed debt.

Table VI-1

Balance of Payments Forecast

In million U.S. dollars

		1972	1973	P1974	E1975
I.	Goods and Services	-541	-499	-2,072	-2,700
	1. Merchandise Exports	1,676	3,271	4,537	4,550
	2. Merchandise Imports	2,250	3,837	6,241	6,800
	Trade Balance	-575	-566	-1,704	-2,250
	3. Invisible Receipts	551	849	850	900
	4. Invisible Payments	517	782	1,218	1,350
	Invisible Balance	34	67	-368	-450
II.	Transfer Payments (Net)	170	190	233	300
	Current Account Balance	-371	-309	-1,839	-2,400
III.	Capital Transactions (Net)	489	630	2,000	2,400
	5. Long-term Capital (Gross)	782	984	1,581	2,157
	6. Amortization (on LT Cap.)	-272	-404	-428	-476
	7. Short-term Capital (Net)	-21	46	847	719
IV	Errors & Omissions	41	19	-146	
V.	Changes in Foreign Exchange Holdings (increase = minus)	-159	-340	-15	0
VI.	Foreign Exchange Holdings	694	1,034	1,049	1,049

Source: ROKG data for 1972-74 and Embassy estimates for 1975.

Table VI-2

Debt Service Payments and Ratios
(million of dollars)

	A1972	A1973	P1974	E1975
A. Foreign Exchange Earnings	2,227	4,120	5,387	5,450
1. Commodity Exports	1,676	3,271	4,537	4,550
2. Service Earnings	551	849	850	900
B. Principal Repayments	272	404	428	476
C. Interest Payments	126	170	239	350
D. Total Debt Service	398	574	667	826
E. (Of which 1-3 year debt)	(44)	(62)	(63)	(75)
F. Debt Service Ratio (D/A x 100)	17.9	13.9	12.4	15.2

Source: ROKG data and Embassy estimates.

PERFORMANCE NETWORK CHART OF HEALTH SECTOR LOAN

(Task completion dates in parenthesis)

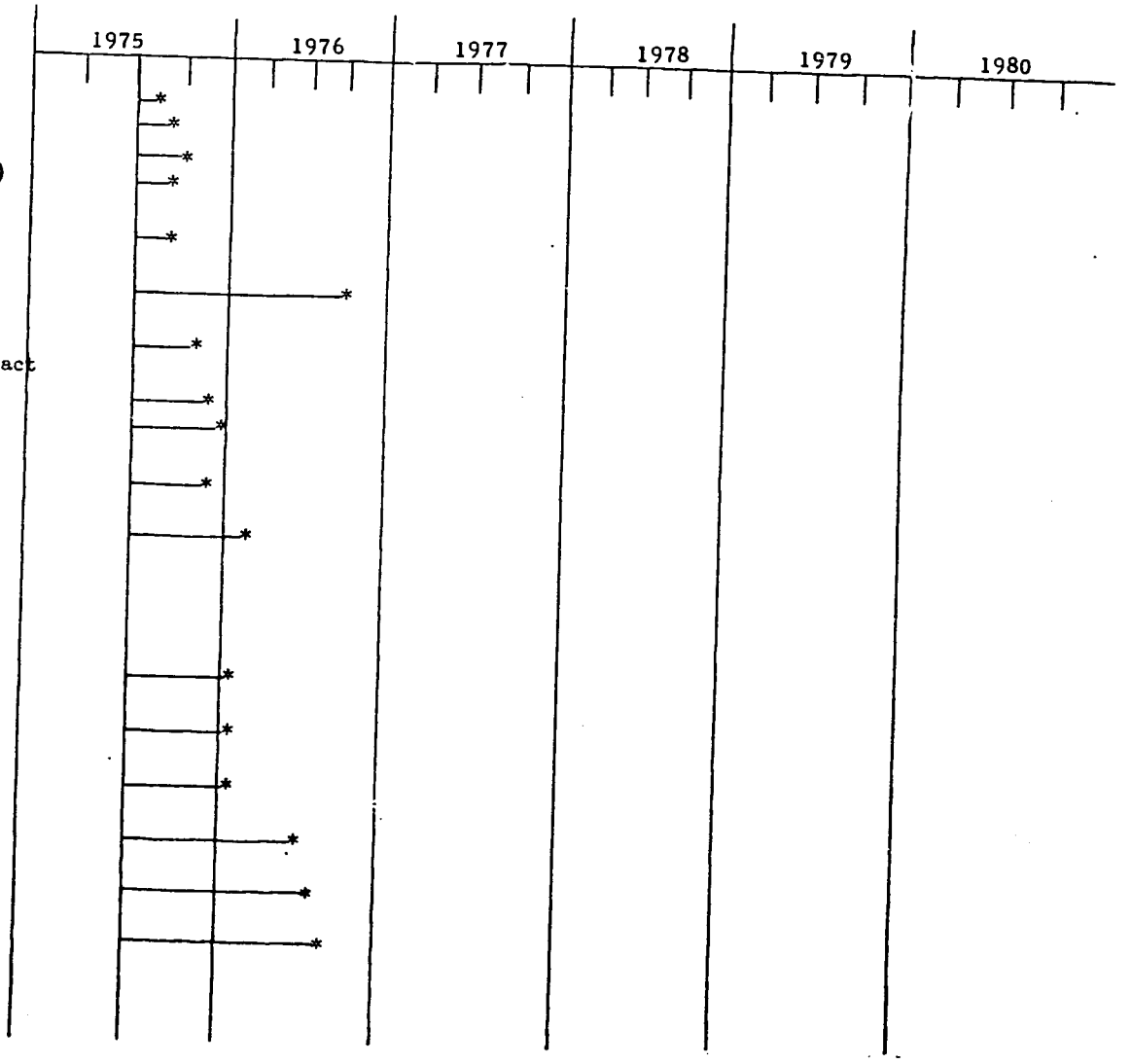
Attachment X

A. Organization Health Loan Project

1. Preparation of Project Loan Agreement (7/75)
2. Signing of Loan Agreement (8/75)
3. Establishment of National Health Council (9/75)
4. Establishment of National Health Secretariat (8/75)
5. Passage of Proclamation of Korean Health Development Corp. (8/75)
6. Passage of Laws, Articles of Incorp. of President (10/76)
7. Establishment of KHDC Board; section of President (10/75)
8. Arrival of USAID Representative or full-time contract Advisor (11/75)
9. Formation of Advisory Board (12/75)
10. Submission of Preliminary budget request by KHDC President to NHC (11/75)
11. Submission of first annual or semi-annual budget of KHDC to Council (2/75)

B. Major Activities of KHDC

1. Assessment of Korean Health Delivery Systems (1/76)
2. Convene First Korean Conf. on Health Service for Low-Income Families (1/76)
3. Publish first issue of KHDC Monthly Newsletter (1/76)
4. Host First Korean Health Manpower Training Workshop (6/76)
5. Plan and conduct Korean Rural Health Education Materials Workshop (7/76)
6. Complete draft of Uniform Project Evaluation Design (8/76)

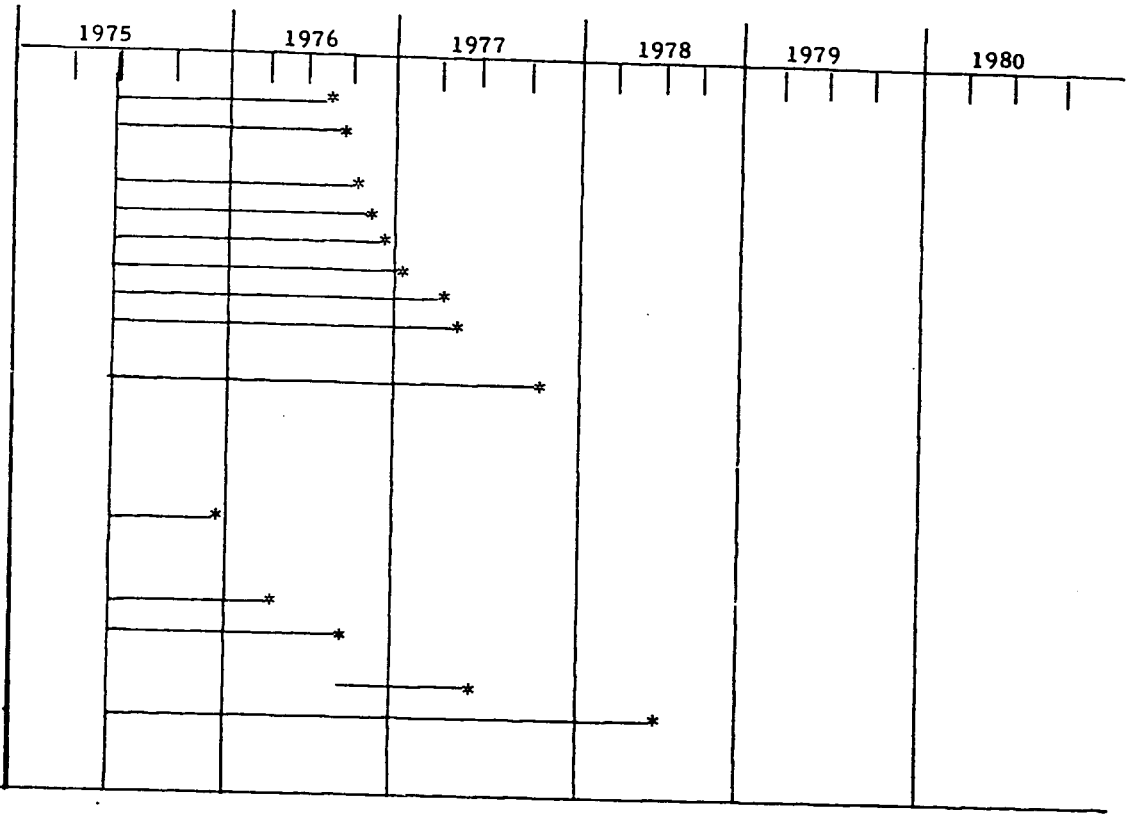


B. Major Activities of KHDC (continued)

7. Conduct Health Project Evaluation Seminar (8/76)
8. Plan and conduct Health Training Seminar (9/76)
9. Submit CY 1977 Plan for Approval by Council including demonstration project plan (10/76)
10. Complete Demonstration Project Eval. Plan (11/76)
11. Secure Law proclaming Demonstration Site (12/76)
12. Preliminary Demonstration Project Plan (1/77)
13. Detailed Demonstration Project Plan (4/77)
14. Initiate Demonstration Project (5/77)
15. Complete baseline studies at Demonstration Project Site (10/77)
16. On-going evaluation of demonstrations

C. Physician Extender* Training & Evaluation

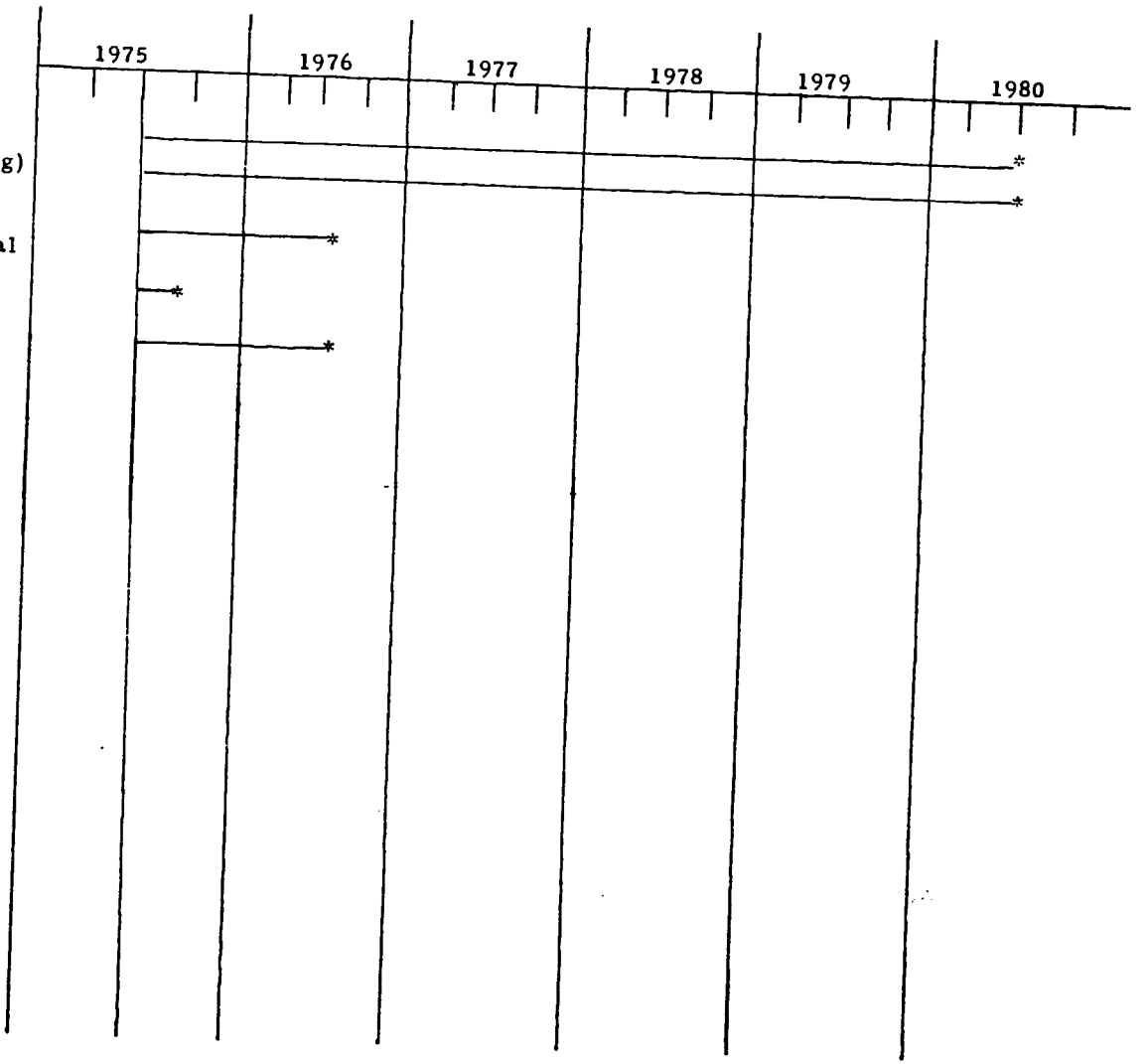
1. Manpower utilization study (12/75)
2. Submit Physician Extender (P. E.) Plan, including objectives, qualifications, test site(s), Trainer plan, other details (3/76)
3. P. E. training of trainers (3 months.) (9/76)
4. P. E. curricula design, protocol development, evaluation plan (9 months, 9/76-6/77)
5. Training of minimum of twelve P. E. s, 1 yr. (6/78)



*The term, "Physician Extender" refers to health workers who are especially trained to provide certain delineated curative and other health services under the nominal supervision of an M. D. The P. E. might be an existing category of health worker with new responsibilities or a new category.

D. Major Activities of the National Health Secretariat

1. Evaluation of Health Loan Project (on-going)
2. Evaluation of Demonstration Site Projects (on-going)
3. Macro-analysis of Health Manpower Utilization (7/76)
4. Holding of a Professional Seminar on Multi-Sectoral Health Planning (9/75).
5. Holding of a Professional Seminar on Health Care Financing (7/76)



Attachment XI

ECONOMIC PLANNING BOARD
REPUBLIC OF KOREA
Seoul, Korea

Mr. Michael H.B. Adler
Director
USAID/Korea

April 30, 1975

Dear Mr. Adler:

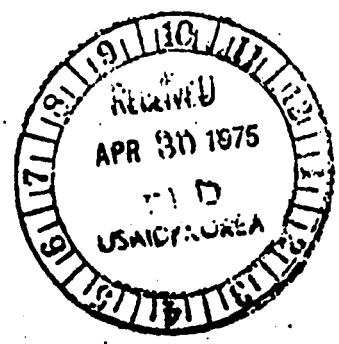
I would like to request a Development Loan of Five Million Dollars (US $5,000,000) for financing a program to design and test new systems to deliver low-cost health services. The details of the program are described in the Project Paper for this loan proposal. As you are aware, this Project Paper was drafted by Korean and U.S. specialists to help us develop new approaches to providing health information and care to our people, especially those in the low-income category. This program will be an integral part of our efforts to give higher priority to health development in our next Five-Year Economic Development Plan.

Please be assured that the Government will make proper budgetary arrangements to provide its counterpart contribution.

Sincerely yours,

for Chin, Jak-Kyu

Duck-Woo Nam
Deputy Prime Minister
and
Minister of Economic Planning Board



Attachment XII

Potential Capacity of the KHDC to Recruit Quality Staff

The KHDC is to be concerned with innovation in health care delivery. Its main purpose is to develop and evaluate innovative means of delivering promotive, preventive, and primary care, at an affordable cost, to low-income people who are not presently served. Consequently, the key problems to be researched and evaluated are not primarily medical problems. They are, however, problems related to economic resource allocation, logistics, administration, task analysis and manpower rationalization, and many other functions requiring expertise not currently available within ministries responsible for the technical aspects of health.

Innovation implies change. The KHDC will be problem-oriented. Persons responsible for its policy and direction must be open to full exploration of all conceivable means to problem solution, regardless of whether those means are currently acceptable or fashionable. This is a modern concept, and in order to be effective this concept must be protected from pressures to conform to currently fashionable ways. Pressures for conformity are normally exerted through control of (a) policy, or (b) funds, or (c) authority to appoint and remove key staff. Consequently, these functions must be immunized from parochial influence by placing them solely within a body reflecting and representing the broad interests of the Korean people and a broad range of disciplines.

As envisioned by the Project Development Team, the project should promote sensitivity to interrelationships between health status and economic development, and it should augment the Government's concerns and endeavors toward achievement of national economic development goals. For maximum mutual benefit, this implies active involvement of EPB and all key ministries in the policy, direction and evaluation of the project. Further, health strategies for the next five-year plan should benefit from both private and public sector inputs in reaching social equity in resource distribution.

For purposes of replicability in the evolution of a comprehensive national health system out of innovative achievements, it is advisable that the project maintain maximum attractability to external donors. The "Secretariat" concept that has been advanced for KHDC is one feature that has already attracted the attention of a United Nations agency as a possible focus for a nutrition research project.

For these reasons, the Project Development Team sought to protect the embryonic KHDC from conventional interest groups through the Secretariat and the Council. The National Health Secretariat is to be staffed and housed in the Korea Development Institute (KDI), which was founded in 1971. KDI is mandated to conduct research on national economic development and related subjects in order to help the Government in formulating economic policies, plans, and programs. The Institute is a quasi-official research agency which maintains a continuing liaison with the Blue House and the Prime Minister's office on national economic matters.

KDI officers and staff members sit on every high-level policy body and on most of the sectoral planning units charged with the development of program elements for the up-coming five-year plan. The President of KDI, Dr. Mahn Je Kim, is a member of the Council for Long-Term Planning under the chairmanship of the Prime Minister, and the Vice President of KDI, Dr. Bon Ho Koo, serves on the Coordinating Committee for Economic Planning chaired by the Vice Minister of the EPB. KDI also holds a co-secretaryship with the EPB on the Economic Policy Council which includes among its members the ministers or vice-ministers of each ministry and provides overall policy directives to the Coordinating Committee on Economic Planning. Finally, KDI Senior Fellows participate as members of the working committees on Population Planning, Educational Planning, Employment and Manpower, Urbanization and Housing, Regional Development, Land Development and Industrial Location, and Health and Social Security. The majority of Senior Fellows also serve as advisors to government ministries and on the boards of their respective professional associations. Many also hold concurrent university appointments. These close personal and professional ties, and the practice of drawing Senior and Visiting Fellows from the academic community place the Korea Development Institute in a unique position to elicit the cooperation of both government agencies and private research institutions in the establishment of a National Health Secretariat.